



Oracle

Exam Questions 1Z0-819

Java SE 11 Developer

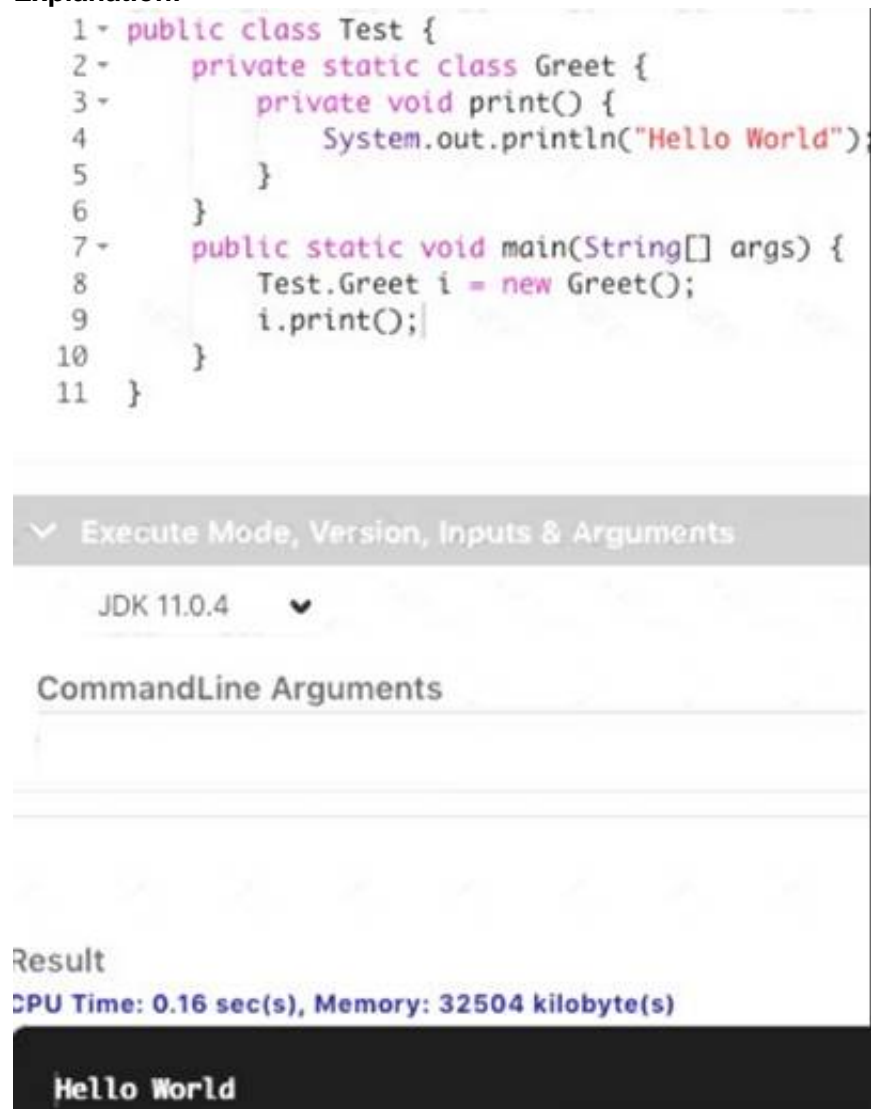
NEW QUESTION 1

Given:

```
1. public class Test {
2.     private static class Greet {
3.         private void print() {
4.             System.out.println("Hello World");
5.         }
6.     }
7.     public static void main(String[] args) {
8.         Test.Greet i = new Greet();
9.         i.print();
10.    }
11. }
```

What is the result?

- A. The compilation fails at line 9.
- B. The compilation fails at line 2.
- C. Hello World
- D. The compilation fails at line 8.

Answer: C**Explanation:**

The screenshot shows a Java code editor with the following code:

```
1 public class Test {
2     private static class Greet {
3         private void print() {
4             System.out.println("Hello World");
5         }
6     }
7     public static void main(String[] args) {
8         Test.Greet i = new Greet();
9         i.print();
10    }
11 }
```

Below the code editor, there is a section titled "Execute Mode, Version, Inputs & Arguments" with a dropdown menu set to "JDK 11.0.4". Underneath, there is a section titled "CommandLine Arguments" with an empty text input field.

At the bottom, there is a "Result" section showing the output: "Hello World". Above the output, it says "CPU Time: 0.16 sec(s), Memory: 32504 kilobyte(s)".

NEW QUESTION 2

Given:

```
public class Tester {
    public static void main(String[] args) {
        StringBuilder sb = new StringBuilder(5);
        sb.append("HOWDY");
        sb.insert(0, ' ');
        sb.replace(3, 5, "LL");
        sb.insert(6, "COW");
        sb.delete(2, 7);
        System.out.println(sb.length());
    }
}
```

What is the result?

- A. 4
- B. 3
- C. An exception is thrown at runtime.
- D. 5

Answer: D

Explanation:

```

6 public class Tester {
7     public static void main(String[] args) {
8         StringBuilder sb = new StringBuilder (5);
9         sb.append ("HOWDY" );
10        sb.insert (0, ' ');
11        sb.replace(3, 5, "LL");
12        sb.insert (6, "COW");
13        sb.delete(2, 7);
14        System.out.println(sb.length());
15    }
16 }

```

(command line arguments)

COMPILE & EXECUTE

PASTE SOURCE

Successfully compiled /tmp/java_82Tlan/Tester.java <-- main method

5

NEW QUESTION 3

Given:

```

package b;
public class Person {
    protected Person() {                //line 1
    }
}

```

and

```

package a;
import b.Person;
public class Main {                    //line 2
    public static void main(String[] args) {
        Person person = new Person(); //line 3
    }
}

```

Which two allow a.Main to allocate a new Person? (Choose two.)

- A. In Line 1, change the access modifier to privateprivate Person() {
- B. In Line 1, change the access modifier to publicpublic Person() {
- C. In Line 2, add extends Person to the Main classpublic class Main extends Person {and change Line 3 to create a new Main objectPerson person = new Main();
- D. In Line 2, change the access modifier to protectedprotected class Main {
- E. In Line 1, remove the access modifierPerson() {

Answer: BC

NEW QUESTION 4

Which interface in the java.util.function package will return a void return type?

- A. Supplier
- B. Predicate
- C. Function
- D. Consumer

Answer: D

NEW QUESTION 5

Given:

```
import java.time.LocalDate;
import static java.time.DayOfWeek.*;
public class Main {
    public static void main(String[] args) {
        var today = LocalDate.now().with(TUESDAY).getDayOfWeek();
        switch(today) {
            case SUNDAY:
            case SATURDAY:
                System.out.println("Weekend");
                break;
            case MONDAY:    FRIDAY:
                System.out.println("Working");
            default:
                System.out.println("Unknown");
        }
    }
}
```

What is the result?

- A. WorkingUnknown
- B. Unknown
- C. TuesdayUnknown
- D. The compilation fails.
- E. Tuesday
- F. Working

Answer: B

Explanation:



NEW QUESTION 6

Which two commands are used to identify class and module dependencies? (Choose two.)

- A. jmod describe
- B. java Hello.java
- C. jdeps --list-deps
- D. jar --show-module-resolution
- E. java --show-module-resolution

Answer: CE

NEW QUESTION 7

Given:

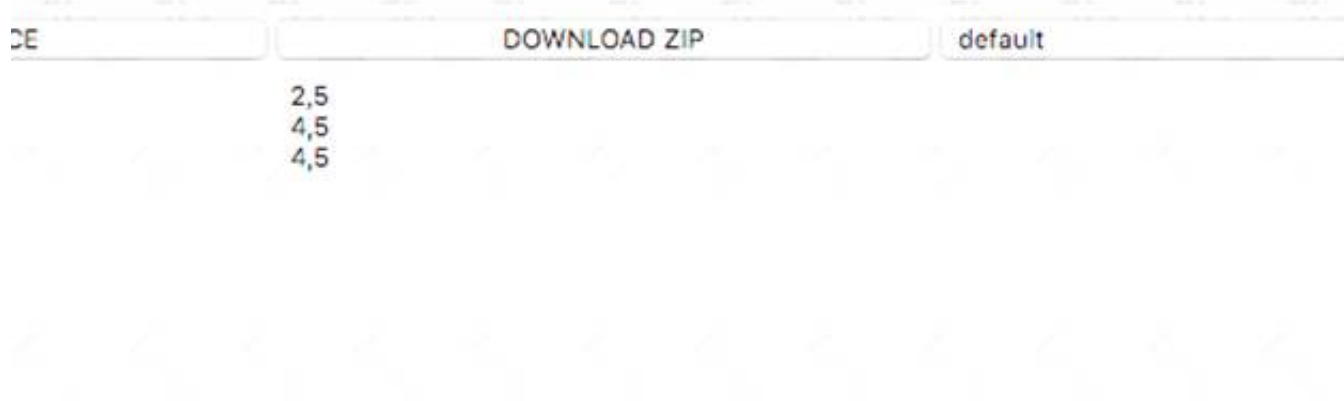
```
public class Tester {
    private int x;
    private static int y;
    public static void main(String[] args) {
        Tester t1 = new Tester();
        t1.x = 2;
        Tester.y = 3;
        Tester t2 = new Tester();
        t2.x = 4;
        t2.y = 5;
        System.out.println(t1.x+", "+t1.y);
        System.out.println(t2.x+", "+Tester.y);
        System.out.println(t2.x+", "+t1.y);
    }
}
```

What is the result?

- A. 2,34,34,5
- B. 2,34,54,5
- C. 2,54,54,5
- D. 2,34,54,3

Answer: C

Explanation:



NEW QUESTION 8

Which two statements are true about the modular JDK? (Choose two.)

- A. The foundational APIs of the Java SE Platform are found in the java.base module.
- B. An application must be structured as modules in order to run on the modular JDK.
- C. It is possible but undesirable to configure modules' exports from the command line.
- D. APIs are deprecated more aggressively because the JDK has been modularized.

Answer: AC

NEW QUESTION 9

Given:

```
public interface API { //line 1
    public void checkValue(Object value)
        throws IllegalArgumentException; //line 2
    public boolean isValueANumber(Object val) {
        if(val instanceof Number) {
            return true;
        }else {
            try {
                Double.parseDouble(val.toString());
                return true;
            }catch (NumberFormatException ex) {
                return false;
            }
        }
    }
}
```

Which two changes need to be made to make this class compile? (Choose two.)

- A. Change Line 1 to an abstract class:public abstract class API {
- B. Change Line 2 access modifier to protected:protected void checkValue(Object value)throws IllegalArgumentException;
- C. Change Line 1 to a class:public class API {
- D. Change Line 1 to extend java.lang.AutoCloseable:public interface API extends AutoCloseable {
- E. Change Line 2 to an abstract method:public abstract void checkValue(Object value)throws IllegalArgumentException;

Answer: CE

NEW QUESTION 10

Given:

```
public class Foo {
    public <T> Collection<T> foo(Collection<T> arg) { ... }
}
```

and

```
public class Bar extends Foo { ... }
```

Which two statements are true if the method is added to Bar? (Choose two.)

- A. `public Collection<String> foo(Collection<String> arg) { ... }` overrides `Foo.foo`.
- B. `public <T> Collection<T> foo(Stream<T> arg) { ... }` overloads `Foo.foo`.
- C. `public <T> List<T> foo(Collection<T> arg) { ... }` overrides `Foo.foo`.
- D. `public <T> Collection<T> foo(Collection<T> arg) { ... }` overloads `Foo.foo`.
- E. `public <T> Collection<T> bar(Collection<T> arg) { ... }` overloads `Foo.foo`.
- F. `public <T> Iterable<T> foo(Collection<T> arg) { ... }` overrides `Foo.foo`.

Answer: CF

NEW QUESTION 10

Given:

```
public class A {  
    private boolean checkValue(int val) {  
        return true;  
    }  
}
```

and

```
public class B extends A {  
    public int modifyVal(int val) {  
        if(checkValue(val)) {  
            return val;  
        } else {  
            return 0;  
        }  
    }  
    public static void Main(String[] args) {  
        B b = new B();  
        System.out.println(b.modifyVal(10));  
    }  
}
```

What is the result?

- A. nothing
- B. It fails to compile.
- C. A `java.lang.IllegalArgumentException` is thrown.
- D. 10

Answer: B

Explanation:

```

1- public class A {
2-     private boolean checkValue(int val) {
3-         return true;
4-     }
5- }
6- and
7- public class B extends A {
8-     public int modifyVal(int val) {
9-         if(checkValue(val)) {
10-             return val;
11-         } else {
12-             return 0;
13-         }
14-     }
15-     public static void Main(String[] args) {
16-         B b = new B();
17-         system.out.println(b.modfiyVal (10));
18-     }
19- }

```

Execute Mode, Version, Inputs & Arguments

JDK 11.0.4

CommandLine Arguments

Result

CPU Time: sec(s), Memory: kilobyte(s)

```

/A.java:6: error: class, interface, or enum expected
and
^
1 error

```

NEW QUESTION 11

Given this enum declaration:

```

1. enum Letter {
2.     ALPHA(100), BETA(200), GAMMA(300);
3.     int v;
4.     Letter(int v) { this.v = v; }
5.     /* Insert code here */
6. }

```

Examine this code: System.out.println(Letter.values()[1]);

What code should be written at line 5 for this code to print 200?

- A. public String toString() { return String.valueOf(ALPHA.v); }
- B. public String toString() { return String.valueOf(Letter.values()[1]); }
- C. public String toString() { return String.valueOf(v); }
- D. String toString() { return "200"; }

Answer: C

Explanation:

```

13 public class Main {
14     enum Letter {
15         ALPHA(100), BETA(200), GAMMA(300);
16         int v;
17         Letter(int v) { this.v = v; }
18         public String toString() { return String.valueOf(v); }
19     }
20
21
22 }
23 public static void main (String[] args) {
24     System.out.println(Letter.values() [1]);
25 }
26 }
27
28

```

Result

compiled and executed in 1.099 sec(s)

200

NEW QUESTION 16

Given:

```

public class MethodTest {
    // line 1
}

```

Which two method implementations are correct, when inserted independently in line 1? (Choose two.)

A.

```

public boolean methodD(int x) {
    return x > 0;
}

```

B.

```

public String methodB() {
    System.out.println("methodB");
}

```

C.

```

public char methodE (String msg) {
    return msg;
}

```

D.

```

public void methodC(int x) {
    return ++x;
}

```

E.

```

public void methodA() {
    System.out.println("methodA");
}

```

A. Option A

B. Option B

C. Option C

D. Option D

E. Option E

Answer: AE

NEW QUESTION 21

Given:

jdeps -jdkinternals C:\workspace4\SimpleSecurity\jar\classes.jar

Which describes the expected output?

- A. jdeps lists the module dependencies and the package names of all referenced JDK internal API
- B. If any are found, the suggested replacements are output in the console.
- C. jdeps outputs an error message that the -jdkinternals option requires either the -summary or the -verbose options to output to the console.
- D. The -jdkinternals option analyzes all classes in the .jar and prints all class-level dependencies.
- E. The -jdkinternals option analyzes all classes in the .jar for class-level dependencies on JDK internal API
- F. If any are found, the results with suggested replacements are output in the console.

Answer: A

Explanation:

-jdkinternals option analyzes all classes in the .jar for class-level dependencies on JDK internal APIs. If any are found, the results with suggested replacements are output in the console.

NEW QUESTION 26

Which two statements set the default locale used for formatting numbers, currency, and percentages? (Choose two.)

- A. Locale.setDefault(Locale.Category.FORMAT, "zh-CN");
- B. Locale.setDefault(Locale.Category.FORMAT, Locale.CANADA_FRENCH);
- C. Locale.setDefault(Locale.SIMPLIFIED_CHINESE);
- D. Locale.setDefault("en_CA");
- E. Locale.setDefault("es", Locale.US);

Answer: BD

NEW QUESTION 27

Given:

```
package A;
class Test {
    String name;
    public Test(String name) {
        this.name = name;
    }
    public String toString() {
        return name;
    }
}
```

and

```
package B;
import A.Test;
public class Main {
    public static void main(String[] args) {
        Test test = new Test("Student");
        System.out.println(test);
    }
}
```

What is the result?

- A. null
- B. nothing
- C. It fails to compile.
- D. java.lang.IllegalAccessException is thrown.
- E. Student

Answer: C

NEW QUESTION 31

Which command line runs the main class com.acme.Main from the module com.example?

- A. java --module-path mods com.example/com.acme.Main
- B. java -classpath com.example.jar com.acme.Main
- C. java --module-path mods -m com.example/com.acme.Main
- D. java -classpath com.example.jar -m com.example/com.acme.Main

Answer: D

NEW QUESTION 32

Given:

```
class Mycar {  
}
```

and

```
javac C:\workspace4\Mycar.java
```

What is the expected result of javac?

- A. javac fails to compile the class and prints the error message, C:\workspace4\Mycar.java:1:error: packagejava does not exist
- B. javac compiles Mycar.java without errors or warnings.
- C. javac fails to compile the class and prints the error message, C:\workspace4\Mycar.java:1:error: expected import java.lang
- D. javac fails to compile the class and prints the error message, Error: Could not find or load main class Mycar.class

Answer: B

NEW QUESTION 36

Given the formula to calculate a monthly mortgage payment:

$$M = P \frac{r(1+r)^n}{(1+r)^n - 1}$$

and these declarations:

```
double m;           //monthly payment  
double r = 0.05/12; //monthly interest rate  
int p = 100_000;    //principal  
int n = 180;        //number of payments
```

How can you code the formula?

- A. `m = p * (r * Math.pow(1 + r, n) / (Math.pow(1 + r, n) - 1));`
- B. `m = p * ((r * Math.pow(1 + r, n) / (Math.pow(1 + r, n)) - 1));`
- C. `m = p * r * Math.pow(1 + r, n) / Math.pow(1 + r, n) - 1;`
- D. `m = p * (r * Math.pow(1 + r, n) / Math.pow(1 + r, n) - 1);`

Answer: A

NEW QUESTION 39

Given:

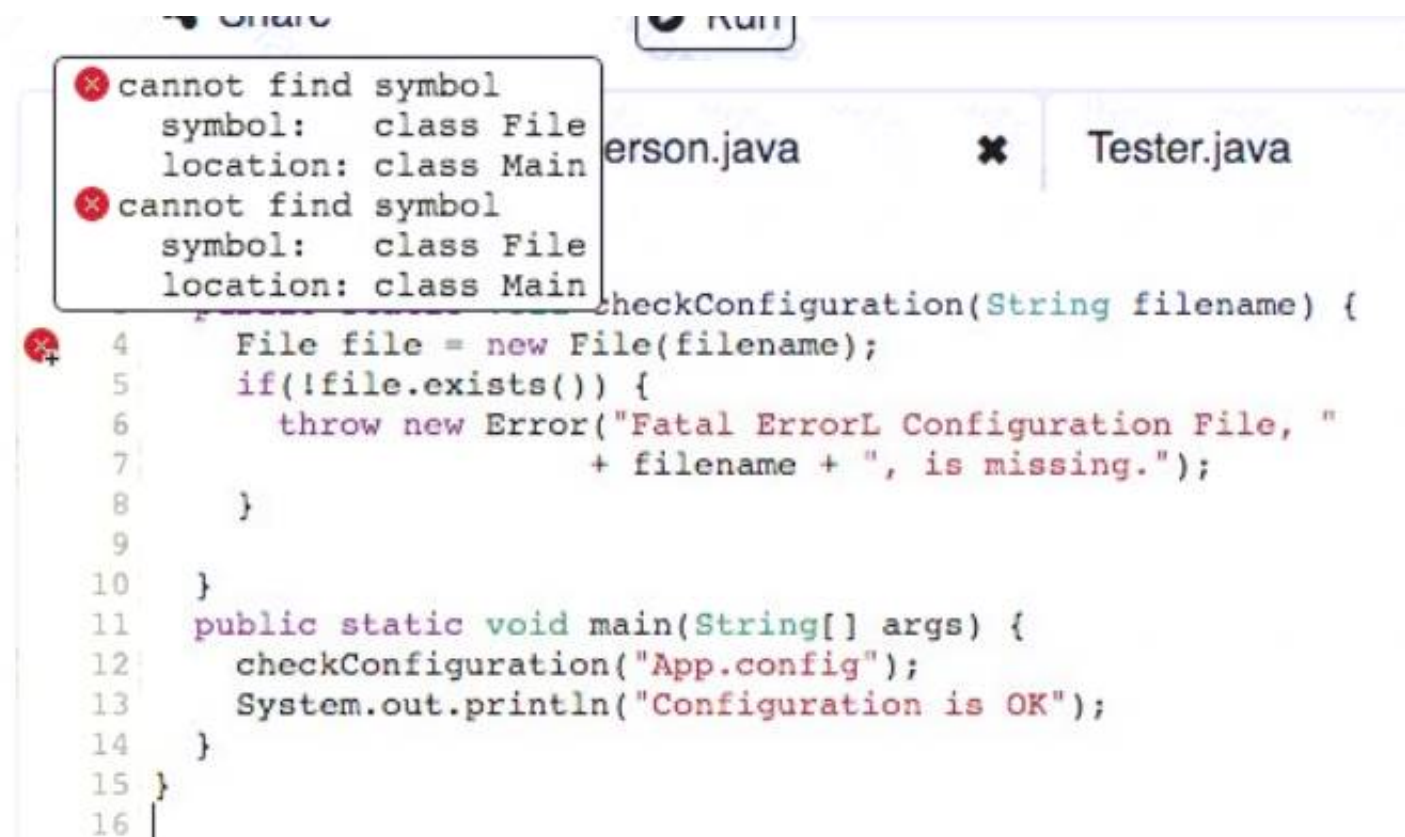
```
public class Main {  
  
    public static void checkConfiguration(String filename) {  
        File file = new File(filename);  
        if(!file.exists()) {  
            throw new Error("Fatal Error: Configuration File, "  
                + filename + ", is missing.");  
        }  
    }  
  
    public static void main(String[] args) {  
        checkConfiguration("App.config");  
        System.out.println("Configuration is OK");  
    }  
}
```

If file "App.config" is not found, what is the result?

- A. Configuration is OK
- B. The compilation fails.
- C. Exception in thread "main" java.lang.Error:Fatal Error: Configuration File, App.config, is missing.
- D. nothing

Answer: B

Explanation:



NEW QUESTION 41

Given:

```

public interface A {
    abstract void x();
}

```

and

```

public abstract class B /* position 1 */ {
    /* position 2 */
    public void x() { }
    public abstract void z();
}

```

and

```

public class C extends B implements A {
    /* position 3 */
}

```

Which code, when inserted at one or more marked positions, would allow classes B and C to compile?

- A. @Override // position 3 void x () {} // position 3 @Override // position 3 public void z() {} // position 3
- B. @Override // position 2 public void z() {} // position 3
- C. implements A // position 1 @Override // position 2
- D. public void z() {} // position 3

Answer: B

NEW QUESTION 45

Given:

```

var numbers = List.of(1,2,3,4,5,6,7,8,9,10);
// line 1
StringBuilder sb = new StringBuilder();
for(int a: numbers) {
    sb.append(f.apply(a));
    sb.append(" ");
}
System.out.println(sb.toString());

```

Which statement on line 1 enables this code to compile?

- A. Function<Integer, Integer> f = n > n * 2;
- B. Function<Integer> f = n > n * 2;
- C. Function<int> f = n > n * 2;
- D. Function<int, int> f = n > n * 2;
- E. Function f = n > n * 2;

Answer: A

Explanation:

```

15
16 public class Main {
17     public static void main(String[] args) {
18         var numbers = List.of(1,2,3,4,5,6,7,8,9,10);
19         Function<Integer, Integer> f = n -> n * 2;
20         StringBuilder sb = new StringBuilder();
21         for(int a: numbers) {
22             sb.append(f.apply(a));
23             sb.append(" ");
24         }
25         System.out.println(sb.toString());
26     }
27 }
28

```

Result

CPU Time: 0.22 sec(s), Memory: 33056 kilobyte(s)

2 4 6 8 10 12 14 16 18 20

NEW QUESTION 46

Given:
 LocalDate d1 = LocalDate.of(1997,2,7); DateTimeFormatter dtf = DateTimeFormatter.ofPattern(/*insert code here*/); System.out.println(dtf.format (d1));
 Which pattern formats the date as Friday 7th of February 1997?

- A. "eeee dd+"th of"+ MMM yyyy"
- B. "eeee dd'th of' MMM yyyy"
- C. "eeee d+"th of"+ MMMM yyyy"
- D. "eeee d'th of' MMMM yyyy"

Answer: B

NEW QUESTION 50

```

public class Test{
    private int num = 1;
    private int div = 0;

    public void divide() {
        try {
            num = num / div;
            System.out.print("Exception");
        }
        catch(ArithmeticException ae) { num = 100; }
        catch(Exception e) { num = 200; }
        finally { num = 300; }
        System.out.print(num);
    }
    public static void main(String args[])
    {
        Test test = new Test();
        test.divide();
    }
}

```

What is the output?

- A. 300
- B. Exception
- C. 200
- D. 100

Answer: A

Explanation:


```

1 public class Test{
2     private int num = 1;
3     private int div = 0;
4
5     public void divide() {
6         try {
7             num = num / div;
8             System.out.print("Exception");
9         }
10        catch(ArithmeticException ae) { num = 100; }
11        catch(Exception e) { num = 200; }
12        finally { num = 300; }
13        System.out.print(num);
14    }
15    public static void main(String args[])
16    {
17        Test test = new Test();
18        test.divide();
19    }
20 }

```

Execute Mode, Version, Inputs & Arguments

JDK 11.0.4

☐ In

CommandLine Arguments

Result

CPU Time: 0.15 sec(s), Memory: 32484 kilobyte(s)

300

NEW QUESTION 51

Given:

```

public class Test {
    public static void doThings() throws GeneralException {
        try {
            throw new RuntimeException("Someting happened");
        } catch (Exception e) {
            throw new SpecificException(e.getMessage());
        }
    }
}

public static void main(String args[]) {
    try{
        Test.doThings();
    } catch (Exception e) {
        System.out.println(e.getMessage());
    }
}

class GeneralException /* line 1 */ {
    public GeneralException(String s) { super(s); }
}

class SpecificException /* line 2 */ {
    public SpecificException(String s) { super(s); }
}

```

Which option should you choose to enable the code to print Something happened?

- A. Add extends GeneralException on line 1.Add extends Exception on line 2.
- B. Add extends SpecificException on line 1.Add extends GeneralException on line 2.

- C. Add extends Exception on line 1. Add extends Exception on line 2.
D. Add extends Exception on line 1. Add extends GeneralException on line 2.

Answer: D

Explanation:

```
1  import java.util.*;
2  import java.io.*;
3  import java.lang.Thread;
4  import java.util.ArrayList;
5  import java.util.LinkedList;
6  import java.util.List;
7
8  public class Test {
9
10     public static void doThings() throws GeneralException {
11         try{
12             throw new RuntimeException("Something happened");
13         } catch (Exception e) {
14             throw new SpecificException (e.getMessage());
15         }
16     }
17 }
18
19 public static void main(String args[]) {
20     try{
21         Test.doThings();
22     } catch (Exception e) {
23         System.out.println(e.getMessage());
24     }
25 }
26 class GeneralException extends Exception {
27     public GeneralException(String s) { super(s); }
28 }
29 class SpecificException extends GeneralException {
30     public SpecificException(String s) { super(s);}
31 }
32 }
```

NEW QUESTION 55

Given:

```
public static void main(String[] args) {
    try (Reader reader1 = new FileReader("File1.txt");
        Reader reader2 = new FileReader("File2.txt");
        Reader reader3 = new FileReader("File3_txt")) {

        } catch (IOException ex) {
            Logger.getLogger(Main.class.getName()).log(Level.SEVERE, null, ex);
        }
    // Line 1
    System.out.println("Done");
}
```

When run and all three files exist, what is the state of each reader on Line 1?

- A. All three readers are still open.
B. All three readers have been closed.
C. The compilation fails.
D. Only reader1 has been closed.

Answer: C

NEW QUESTION 56

Given:

```
class ConSuper {
    protected ConSuper() {
        this(2);
        System.out.print("1");
    }
    protected ConSuper(int a) {
        System.out.print(a);
    }
}
```

and

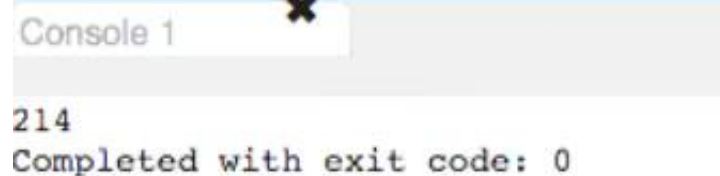
```
public class ConSub extends ConSuper{
    ConSub() {
        this(4);
        System.out.print("3");
    }
    ConSub(int a) {
        System.out.print(a);
    }
    public static void main (String[] args) {
        new ConSub(4);
    }
}
```

What is the result?

- A. 2134
- B. 2143
- C. 214
- D. 234

Answer: C

Explanation:



Console 1

214

Completed with exit code: 0

NEW QUESTION 59

Consider this method declaration:

```
void setSessionUser(Connection conn, String user) throws SQLException {
    Statement stmt = conn.createStatement();
    String sql = <EXPRESSION>;
    stmt .execute();
}
```

- A) "SET SESSION AUTHORIZATION " + user
- B) "SET SESSION AUTHORIZATION " + stmt.enquoteIdentifier(user) Is A or B the correct replacement for <EXPRESSION> and why?

- A. A, because it sends exactly the value of user provided by the calling code.
- B. B, because enquoting values provided by the calling code prevents SQL injection.
- C. A and B are functionally equivalent.
- D. A, because it is unnecessary to enclose identifiers in quotes.
- E. B, because all values provided by the calling code should be enquoted.

Answer: A

NEW QUESTION 63

Given:

```
public class Person {  
    private String name;  
    public void setName(String name) {  
        String title = "Dr. ";  
        name = title+name;  
    }  
    public String toString() {  
        return name;  
    }  
}
```

and

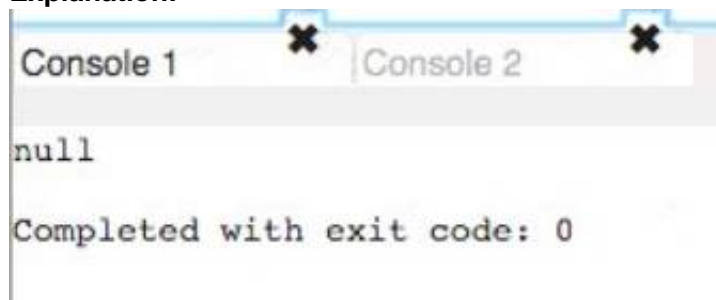
```
public class Test {  
    public static void main(String args[]) {  
        Person p = new Person();  
        p.setName("Who");  
        System.out.println(p);  
    }  
}
```

What is the result?

- A. D
- B. Who
- C. Dr
- D. Null
- E. An exception is thrown at runtime.
- F. null

Answer: D

Explanation:



```
Console 1 X Console 2 X  
null  
Completed with exit code: 0
```

NEW QUESTION 64

Which is the correct order of possible statements in the structure of a Java class file?

- A. class, package, import
- B. package, import, class
- C. import, package, class
- D. package, class, import
- E. import, class, package

Answer: B

NEW QUESTION 69

Given:

```
public class DNASynth {
    int aCount;
    int tCount;
    int cCount;
    int gCount;

    DNASynth(int a, int tCount, int c, int g){
        // line 1
    }
    int setCCount(int c){
        return c;
    }
    void setGCount(int gCount){
        this.gCount = gCount;
    }
}
```

Which two lines of code when inserted in line 1 correctly modifies instance variables? (Choose two.)

- A. setCCount(c) = cCount;
- B. tCount = tCount;
- C. setGCount(g);
- D. cCount = setCCount(c);
- E. aCount = a;

Answer: BE

NEW QUESTION 70

Given the code fragment:

```
String s1 = new String("ORACLE");
String s2 = "ORACLE";
String s3 = s1.intern();

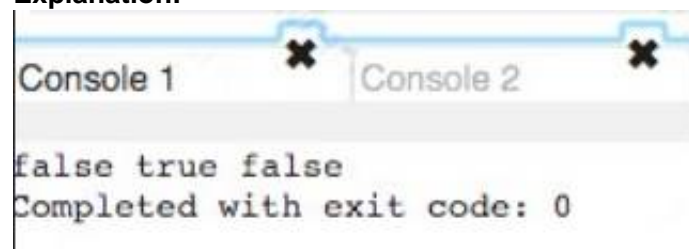
System.out.print((s1==s2) + " ");
System.out.print((s2==s3) + " ");
System.out.println(s1==s3);
```

What is the result?

- A. false true true
- B. true false false
- C. false false true
- D. false true false

Answer: D

Explanation:



NEW QUESTION 71

Which two safely validate inputs? (Choose two.)

- A. Delegate numeric range checking of values to the database.
- B. Accept only valid characters and input values.
- C. Use trusted domain-specific libraries to validate inputs.
- D. Assume inputs have already been validated.
- E. Modify the input values, as needed, to pass validation.

Answer: AB

NEW QUESTION 72

Given:


```
class Employee {  
    String office;  
}
```

and the code fragment:

```
5. public class HRApp {  
6.     var employee = new ArrayList<Employee>();  
7.     public var display() {  
8.         var employee = new Employee();  
9.         var offices = new ArrayList<>();  
10.        offices.add("Chicago");  
11.        offices.add("Bangalore");  
12.        for (var office : offices) {  
13.            System.out.print("Employee Location"+ office);  
14.        }  
15.    }  
16. }
```

Which two lines cause compilation errors? (Choose two.)

- A. line 12
- B. line 6
- C. line 9
- D. line 8
- E. line 7

Answer: BE

NEW QUESTION 73

A company has an existing sales application using a Java 8 jar file containing packages: com.company.customer; com.company.customer.orders; com.company.customer.info; com.company.sales; com.company.sales.leads; com.company.sales.closed; com.company.orders; com.company.orders.pending; com.company.orders.shipped. To modularize this jar file into three modules, customer, sales, and orders, which module-info.java would be correct?

A)

```
module com.company.customer {  
    opens com.company.customer;  
}  
module com.company.sales {  
    opens com.company.sales;  
}  
module com.company.orders {  
    opens com.company.orders;  
}
```

B)

```
module com.company.customer {  
    exports com.company.customer;  
}  
module com.company.sales {  
    exports com.company.sales;  
}  
module com.company.orders {  
    exports com.company.orders;  
}
```

C)

```
module com.company.customer {  
    requires com.company.customer;  
}  
module com.company.sales {  
    requires com.company.sales;  
}  
module com.company.orders {  
    requires com.company.orders;  
}
```

D)


```
module com.company.customer {
    provides com.company.customer;
}
module com.company.sales{
    provides com.company.sales;
}
module com.company.orders {
    provides com.company.orders;
}
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

NEW QUESTION 76

Given the code fragment:

```
int[] secA = { 2, 4, 6, 8, 10 };
int[] secB = { 2, 4, 8, 6, 10 };
int res1 = Arrays.mismatch(secA, secB);
int res2 = Arrays.compare(secA, secB);
System.out.print(res1 + " : " + res2);
```

What is the result?

- A. -1 : 2
- B. 2 : -1
- C. 2 : 3
- D. 3 : 0

Answer: B

NEW QUESTION 80

Given:

```
public class MyResource {
    public MyResource () {
    }
    // Resource methods
}
```

You want to use the myResource class in a try-with-resources statement. Which change will accomplish this?

- A. Extend AutoCloseable and override the close method.
- B. Implement AutoCloseable and override the autoClose method.
- C. Extend AutoCloseable and override the autoClose method.
- D. Implement AutoCloseable and override the close method.

Answer: D

NEW QUESTION 81

Given:

```
String[][] arr = {
    {"Red", "White"},
    {"Black"},
    {"Blue", "Yellow", "Green", "Violet"}
};
for(int row = 0; row < arr.length; row++) {
    int column = 0;
    for(; column < arr[row].length; column++) {
        System.out.println "[" + row + ", " + column + "] = " + arr[row][column];
    }
}
```

What is the result?

- A. [0,0] = Red[0,1] = White[1,0] = Black[1,1] = Blue[2,0] = Yellow[2,1] = Green[3,0] = Violet
- B. [0,0] = Red[1,0] = Black[2,0] = Blue
- C. java.lang.ArrayIndexOutOfBoundsException thrown
- D. [0,0] = Red[0,1] = White[1,0] = Black[2,0] = Blue[2,1] = Yellow[2,2] = Green[2,3] = Violet

Answer: D

Explanation:



```

Console 1 Console 2 Console 3
[0,0] =Red
[0,1] =White
[1,0] =Black
[2,0] =Blue
[2,1] =Yellow
[2,2] =Green
[2,3] =Violet
Completed with exit code: 0
  
```

NEW QUESTION 85

Given:

```

public interface TestInterface {
    default void samplingProbeProcedure() {
        probeProcedure();
        System.out.println("Collect Sample");
        System.out.println("Leave Asteroid");
        System.out.println("Dock with Main Craft");
    }
    default void explosionProbeProcedure() {
        probeProcedure();
        System.out.println("Explode")
    }
}
  
```

Examine these requirements:

- > Eliminate code duplication.
- > Keep constant the number of methods other classes may implement from this interface. Which method can be added to meet these requirements?

- A.

```
private default void probeProcedure(){
    System.out.println("Launch Probe");
    System.out.println("Land on Asteroid");
}
```
- B.

```
static void probeProcedure() {
    System.out.println("Launch Probe");
    System.out.println("Land on Asteroid");
}
```
- C.

```
private void probeProcedure() {
    System.out.println("Launch Probe");
    System.out.println("Land on Asteroid");
}
```
- D.

```
default void probeProcedure() {
    System.out.println("Launch Probe");
    System.out.println("Land on Asteroid");
}
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: B

NEW QUESTION 88

Given:

```
public class Hello {
    class Greeting {
        void sayHi() {
            System.out.println("Hello world");
        }
    }
    public static void main(String... args) {
        // Line 1
    }
}
```

What code must you insert on Line 1 to enable the code to print Hello world?

- A. Hello.Greeting myG = new Hello.Greeting() myG.sayHi();
- B. Hello myH = new Hello();Hello.Greeting myG = myH.new Greeting(); myG.sayHi();
- C. Hello myH = new Hello();Hello.Greeting myG = myH.new Hello.Greeting(); myG.sayHi();
- D. Hello myH = new Hello(); Greeting myG = new Greeting(); myG.sayHi ();

Answer: B

NEW QUESTION 92

Given:

```
var i = 10;
var j = 5;
i += (j * 5 + j) / i - 2;
System.out.println(i);
```

What is the result?

- A. 5
- B. 3
- C. 23
- D. 25
- E. 11

Answer: E

NEW QUESTION 95

Which two statements are correct about modules in Java? (Choose two.)

- A. java.base exports all of the Java platforms core packages.
- B. module-info.java can be placed in any folder inside module-path.
- C. A module must be declared in module-info.java file.
- D. module-info.java cannot be empty.
- E. By default, modules can access each other as long as they run in the same folder.

Answer: AC

NEW QUESTION 100

Assume ds is a DataSource and the EMP table is defined appropriately.

```
try (Connection conn = ds.getConnection();
    PreparedStatement ps = conn.prepareStatement("INSERT INTO EMP VALUES(?, ?, ?)")) {
    ps.setObject(1, 101, JDBCType.INTEGER);
    ps.setObject(2, "SMITH", JDBCType.VARCHAR);
    ps.setObject(3, "HR", JDBCType.VARCHAR);
    ps.executeUpdate();
    ps.setInt(1, 102);
    ps.setString(2, "JONES");
    ps.executeUpdate();
}
```

What does executing this code fragment do?

- A. inserts two rows (101, 'SMITH', 'HR') and (102, 'JONES', NULL)
- B. inserts two rows (101, 'SMITH', 'HR') and (102, 'JONES', 'HR')
- C. inserts one row (101, 'SMITH', 'HR')
- D. throws a SQLException

Answer: C

NEW QUESTION 103

Given:

```
public class Person {  
    private String name = "Joe Bloggs";  
    public Person(String name) {  
        this.name = name;  
    }  
    public String toString() {  
        return name;  
    }  
}
```

and

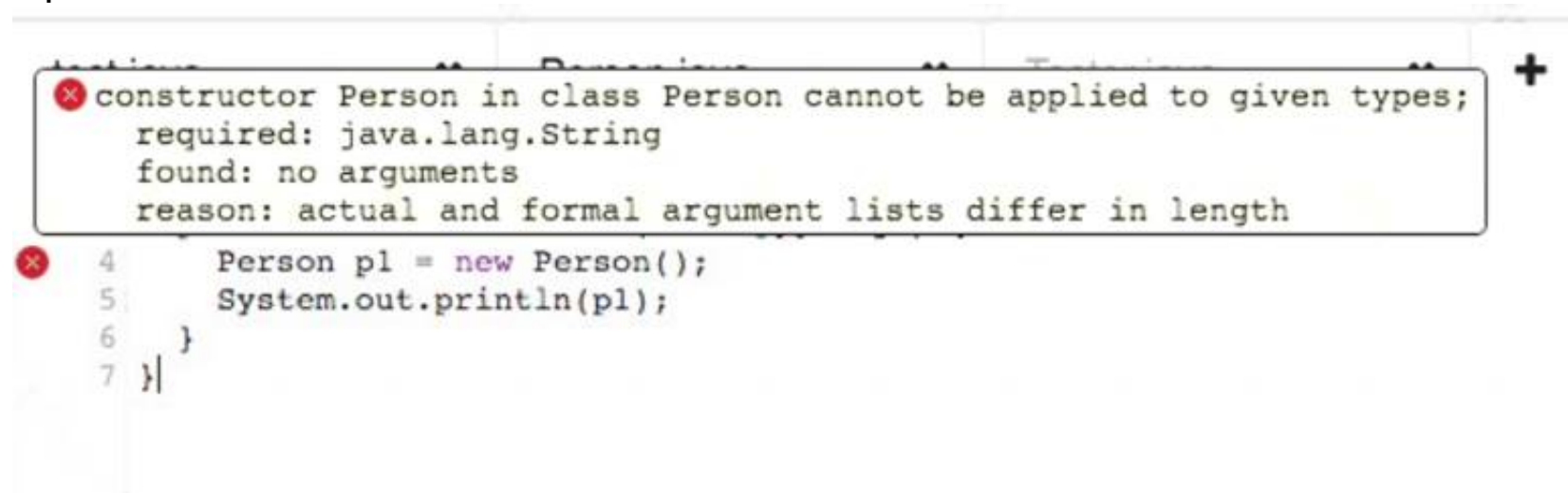
```
public class Tester {  
    public static void main(String[] args) {  
        Person p1 = new Person(); // line 1  
        System.out.println(p1);  
    }  
}
```

What is the result?

- A. null
- B. Joe Bloggs
- C. The compilation fails due to an error in line 1.
- D. p1

Answer: C

Explanation:



NEW QUESTION 105

Which describes an aspect of Java that contributes to high performance?

- A. Java prioritizes garbage collection.
- B. Java has a library of built-in functions that can be used to enable pipeline burst execution.
- C. Java monitors and optimizes code that is frequently executed.
- D. Java automatically parallelizes code execution.

Answer: C

NEW QUESTION 109

Given:


```
public class DNASynth {
    int aCount;
    int tCount;
    int cCount;
    int gCount;

    int getACount(int aCount) {
        return aCount;
    }
    int getTCount(int tCount) {
        return this.tCount;
    }
    int getCCount() {
        return getTotalCount() - this.aCount - getTCount(0) - gCount;
    }
    int getGCount() {
        return getGCount();
    }
    int getTotalCount() {
        return aCount + getTCount(0) + this.cCount + this.gCount;
    }
}
```

Which two methods facilitate valid ways to read instance fields? (Choose two.)

- A. getTCount
- B. getACount
- C. getTotalCount
- D. getCCount
- E. getGCount

Answer: CD

NEW QUESTION 111

Given:

```
public class Main {
    public static void main(String[] args) {
        Consumer consumer = msg -> System.out::print; // line 1
        consumer.accept("Hello Lambda !");
    }
}
```

This code results in a compilation error.

Which code should be inserted on line 1 for a successful compilation?

- A. Consumer consumer = msg -> { return System.out.print(msg); };
- B. Consumer consumer = var arg > {System.out.print(arg);};
- C. Consumer consumer = (String args) > System.out.print(args);
- D. Consumer consumer = System.out::print;

Answer: D

Explanation:


```

1  import java.util.*;
2  import java.io.*;
3  import java.nio.file.*;
4  import java.util.List;
5  import java.util.function.Consumer;
6
7  public class Main {
8
9      public static void main(String[] args) {
10         Consumer consumer = System.out::print;
11         consumer.accept("Hello Lambda !");
12     }
13 }

```

Execute Mode, Version, Inputs & Arguments

JDK 11.0.4

CommandLine Arguments

Result

CPU Time: 0.16 sec(s), Memory: 32896 kilobyte(s)

Hello Lambda !

NEW QUESTION 114

Given:

```

1. public class Main {
2.     public static void greet(String... args) {
3.         System.out.print("Hello ");
4.         for (String arg : args) {
5.             System.out.println(arg);
6.         }
7.     }
8.     public static void main(String[] args) {
9.         Main c = null;
10.        c.greet();
11.    }
12. }


```

What is the result?

- A. NullPointerException is thrown at line 4.
- B. NullPointerException is thrown at line 10.
- C. A compilation error occurs.
- D. Hello

Answer: D

Explanation:



NEW QUESTION 118

Given:

```
public interface A {
    public Iterable a();
}
public interface B extends A {
    public Collection a();
}
public interface C extends A {
    public Path a();
}
public interface D extends B, C {
}
```

Why does D cause a compilation error?

- A. D inherits a() only from C.
- B. D inherits a() from B and C but the return types are incompatible.
- C. D extends more than one interface.
- D. D does not define any method.

Answer: B

NEW QUESTION 123

Given:

```
package test;
import java.time.*;
public class Diary {
    private LocalDate now = LocalDate.now();
    public LocalDate getDate() {
        return now;
    }
}
```

and

```
package test;
public class Tester {
    public static void main(String[] args) {
        Diary d = new Diary();
        System.out.println(d.getDate());
    }
}
```

Which statement is true?

- A. Class Tester does not need to import java.time.LocalDate because it is already visible to members of the package test.
- B. All classes from the package java.time
- C. are loaded for the class Diary.
- D. Only LocalDate class from java.time package is loaded.
- E. Tester must import java.time.LocalDate in order to compile.

Answer: A

NEW QUESTION 127

Given:

```
public method foo() throws FooException {
    ...
}
```

and omitting the throws FooException clause results in a compilation error. Which statement is true about FooException?

- A. FooException is a subclass of RuntimeException.
- B. FooException is unchecked.
- C. The body of foo can only throw FooException.
- D. The body of foo can throw FooException or one of its subclasses.

Answer: D

NEW QUESTION 132

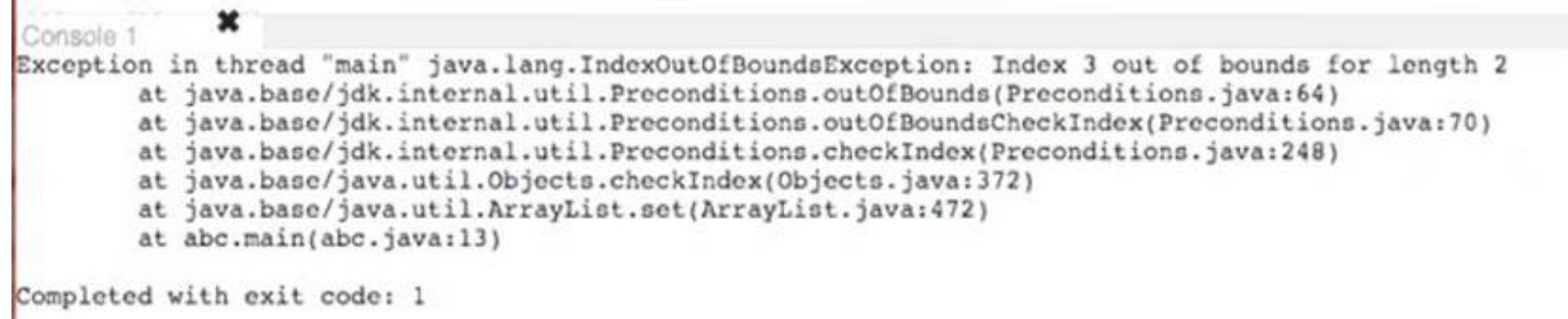
Given:

var data = new ArrayList<>(); data.add("Peter");
data.add(30); data.add("Market Road"); data.set(1, 25); data.remove(2); data.set(3, 1000L); System.out.print(data); What is the output?

- A. [Market Road, 1000]
- B. [Peter, 30, Market Road]
- C. [Peter, 25, null, 1000]
- D. An exception is thrown at run time.

Answer: D

Explanation:



```
Console 1
Exception in thread "main" java.lang.IndexOutOfBoundsException: Index 3 out of bounds for length 2
    at java.base/jdk.internal.util.Preconditions.outOfBounds(Preconditions.java:64)
    at java.base/jdk.internal.util.Preconditions.outOfBoundsCheckIndex(Preconditions.java:70)
    at java.base/jdk.internal.util.Preconditions.checkIndex(Preconditions.java:248)
    at java.base/java.util.Objects.checkIndex(Objects.java:372)
    at java.base/java.util.ArrayList.set(ArrayList.java:472)
    at abc.main(abc.java:13)

Completed with exit code: 1
```

NEW QUESTION 134

Given:

```
import java.util.List;
import java.util.function.BinaryOperator;
public class Main {
    public static void main(String... args) {
        List<Employee> list = List.of(new Employee("John", 80000.0), new Employee("Scott",
90000.0));
        double starts = 0.0;
        double ratio = 1.0;
        BinaryOperator<Double> bo = (a, b) -> a + b;
        double totalSalary = list.stream().map(e -> e.getSalary() * ratio).reduce(starts, bo);
        // line 1
        System.out.println("Total salary = " + totalSalary);
    }
}

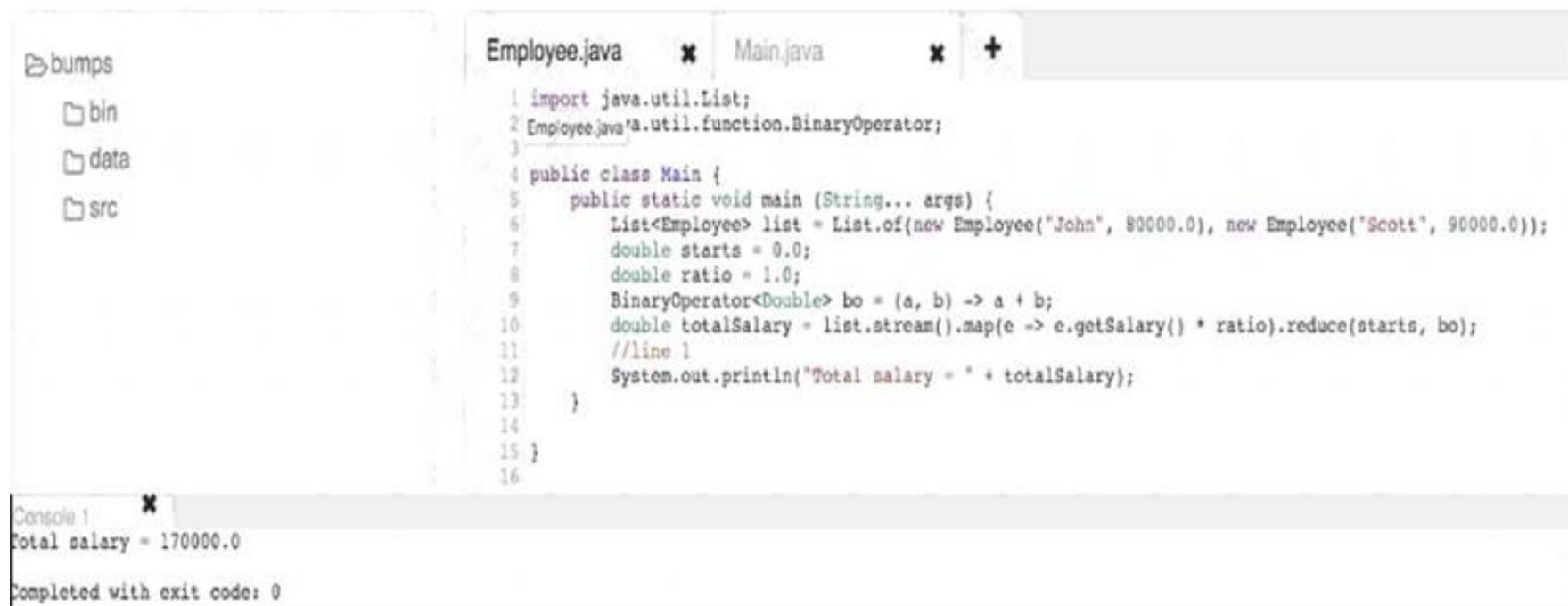
class Employee {
    String name;
    double salary;
    public Employee(String name, double salary) {
        this.name = name;
        this.salary = salary;
    }
    public String getName() { return name; }
    public double getSalary() { return salary; }
}
```

Which statement is equivalent to line 1?

- A. `double totalSalary = list.stream().map(e -> e.getSalary() * ratio).reduce(bo).ifPresent(p -> p.doubleValue());`
- B. `double totalSalary = list.stream().mapToDouble(e -> e.getSalary() * ratio).sum;`
- C. `double totalSalary = list.stream().map(Employee::getSalary * ratio).reduce(bo).orElse(0.0);`
- D. `double totalSalary = list.stream().mapToDouble(e -> e.getSalary() * ratio).reduce(starts, bo);`

Answer: C

Explanation:



```

Employee.java x Main.java x +
1 import java.util.List;
2 Employee.java:8:util.function.BinaryOperator;
3
4 public class Main {
5     public static void main (String... args) {
6         List<Employee> list = List.of(new Employee("John", 80000.0), new Employee("Scott", 90000.0));
7         double starts = 0.0;
8         double ratio = 1.0;
9         BinaryOperator<Double> bo = (a, b) -> a + b;
10        double totalSalary = list.stream().map(e -> e.getSalary() * ratio).reduce(starts, bo);
11        //line 1
12        System.out.println("Total salary = " + totalSalary);
13    }
14
15 }
16

Console 1 x
Total salary = 170000.0
Completed with exit code: 0
    
```

NEW QUESTION 137

Given:

```

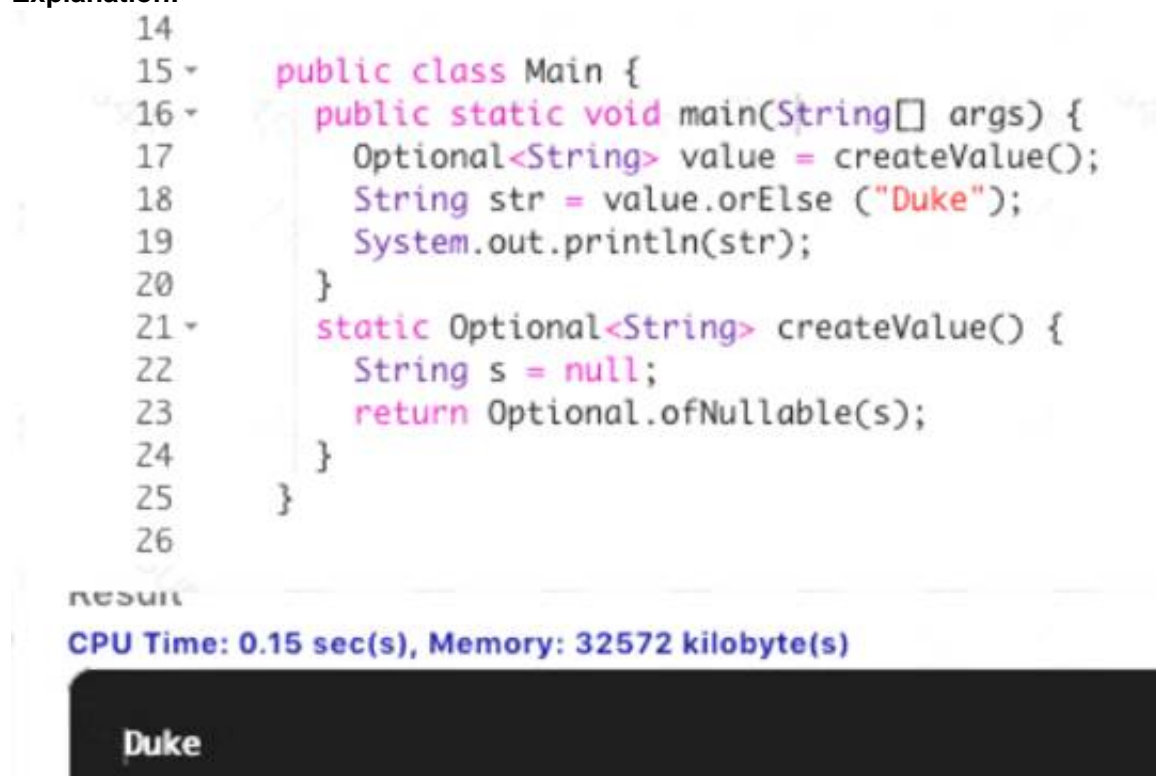
public class Main {
    public static void main(String[] args) {
        Optional<String> value = createValue();
        String str = value.orElse ("Duke");
        System.out.println(str);
    }
    static Optional<String> createValue() {
        String s = null;
        return Optional.ofNullable(s);
    }
}
    
```

What is the output?

- A. null
- B. A NoSuchElementException is thrown at run time.
- C. Duke
- D. A NullPointerException is thrown at run time.

Answer: C

Explanation:



```

14
15 ~ public class Main {
16 ~ public static void main(String[] args) {
17     Optional<String> value = createValue();
18     String str = value.orElse ("Duke");
19     System.out.println(str);
20 }
21 ~ static Optional<String> createValue() {
22     String s = null;
23     return Optional.ofNullable(s);
24 }
25 }
26

result
CPU Time: 0.15 sec(s), Memory: 32572 kilobyte(s)

Duke
    
```

NEW QUESTION 141

Which two statements independently compile? (Choose two.)

- A. List<? super Short> list = new ArrayList<Number>();
- B. List<? super Number> list = new ArrayList<Integer>();
- C. List<? extends Number> list = new ArrayList<Byte>();
- D. List<? extends Number> list = new ArrayList<Object>();
- E. List<? super Float> list = new ArrayList<Double>();

Answer: AC

Explanation:

```
1 import java.util.*;
2 import java.text.*;
3 import java.io.*;
4 import java.lang.Thread;
5 import java.util.ArrayList;
6 import java.util.LinkedList;
7 import java.util.List;
8 import java.util.function.Consumer;
9 import java.util.stream.Stream;
10 import java.util.stream.IntStream;
11 import java.util.Optional;
12
13 public class Intel {
14     public static void main (String[] args) {
15         List<? extends Number> list = new ArrayList<Byte>()
16     }
17 }
```

Execute Mode, Version, Inputs & Arguments

JDK 11.0.4

Result

compiled and executed in 1.173 sec(s)

NEW QUESTION 144

Given the Person class with age and name along with getter and setter methods, and this code fragment:

```
List<Person> persons = new ArrayList(List.of(new Person(44,"Tom"),
                                              new Person(40,"Aman"),
                                              new Person(40,"Peter")));

persons.sort(Comparator.comparing((Person::getAge))
                  .thenComparing(Person::getName)
                  .reversed());

persons.forEach(p1->System.out.print(" "+p1.getName()));
```

What will be the result?

- A. Aman Tom Peter
- B. Tom Aman Peter
- C. Aman Peter Tom
- D. Tom Peter Aman

Answer: C

NEW QUESTION 149

Analyze the code:


```
public class Test {
    static String prefix = "Global:";
    private String name = "namespace";
    public static String getName() {
        return new Test().name;
    }
    public static void main(String[] args) {
        Test t = new Test();
        System.out.println(/* Insert code here */);
    }
}
```

Which two options can you insert inside println method to produce Global:namespace? (Choose two.)

- A. Test.prefix+Test.name
- B. new Test().prefix+new Test().name
- C. Test.prefix+Test.getName()
- D. Test.getName+prefix
- E. prefix+Test.name
- F. prefix+name

Answer: BC

NEW QUESTION 151

Given:

/code/a/Test.java containing:

```
package a;
import b.Best;
public class Test {
    public static void main(String[] args) {
        Best b = new Best();
    }
}
```

and

/code/b/Best.java containing: package b;

public class Best { }

Which is the valid way to generate bytecode for all classes?

- A. java /code/a/Test.java
- B. javac -d /code /code/a/Test
- C. java /code/a/Test.java /code/b/Best.java
- D. java -cp /code a.Test
- E. javac -d /code /code/a/Test.java /code/b/Best.java
- F. javac -d /code /code/a/Test.java

Answer: E

NEW QUESTION 154

Given:

```
public class X {
}
```

and

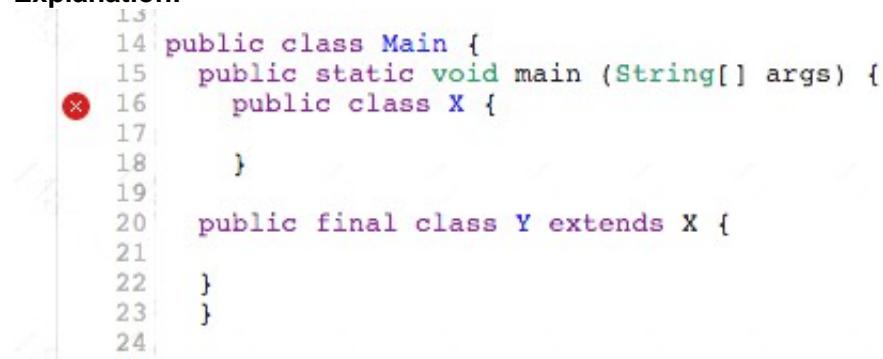
```
public final class Y extends X {
}
```

What is the result of compiling these two classes?

- A. The compilation fails because there is no zero args constructor defined in class X.
- B. The compilation fails because either class X or class Y needs to implement the toString() method.
- C. The compilation fails because a final class cannot extend another class.
- D. The compilation succeeds.

Answer: B

Explanation:



```
13
14 public class Main {
15     public static void main (String[] args) {
16         public class X {
17
18         }
19
20     public final class Y extends X {
21
22     }
23 }
24
```

NEW QUESTION 159

Given:

```
public class Employee {
    private String name;
    private String locality;
    /* the constructor, getter and setter methods code goes here */
}
```

and:

```
8. List<Employee> roster = new ArrayList<>();
9. long empCount = roster.stream()
10. /* insert code here */
11. System.out.print(empCount);
```

Which code, when inserted on line 10, prints the number of unique localities from the roster list?

- A. `.map(Employee::getLocality).distinct().count();`
- B. `map(e -> e.getLocality()).count();`
- C. `.map(e -> e.getLocality()).collect(Collectors.toSet()).count();`
- D. `.filter(Employee::getLocality).distinct().count();`

Answer: D

NEW QUESTION 161

Given:

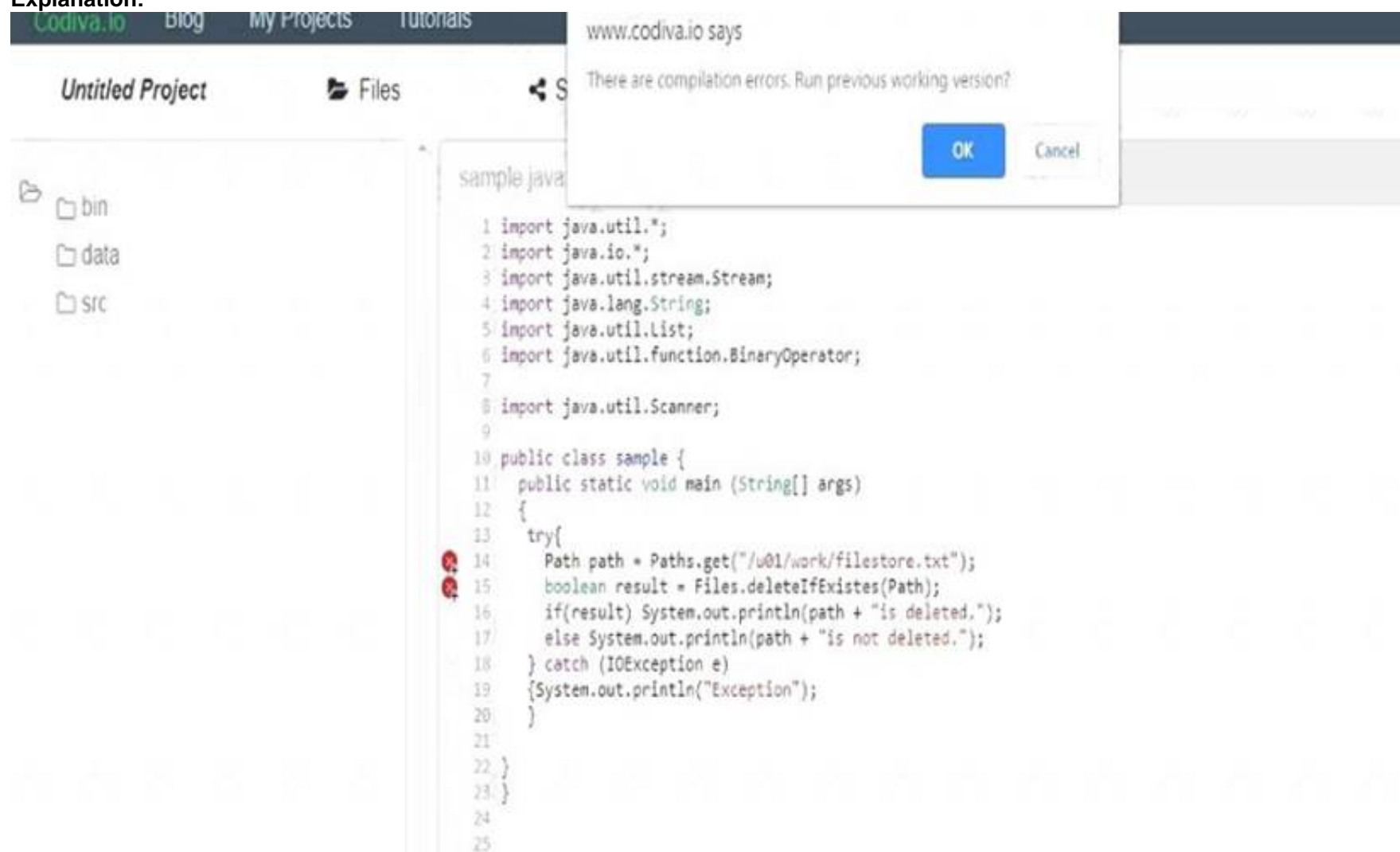
```
public class Main {
    public static void main(String[] args) {
        try {
            Path path = Paths.get("/u01/work/filestore.txt");
            boolean result = Files.deleteIfExists(path);
            if(result) System.out.println(path + "is deleted.");
            else System.out.println(path + "is not deleted.");
        } catch (IOException e) {
            System.out.println("Exception");
        }
    }
}
```

Assume the file on path does not exist. What is the result?

- A. The compilation fails.
- B. `/u01/work/filestore.txt` is not deleted.
- C. Exception
- D. `/u01/work/filestore.txt` is deleted.

Answer: A

Explanation:



NEW QUESTION 165

Given:

```
import java.io.*;
public class Tester {
    public static void main(String[] args) {
        try {
            doA();
            doB();
        } catch(IOException e) {
            System.out.print("c");
            return;
        } finally{
            System.out.print("d");
        }
        System.out.print("f");
    }
    private static void doA() {
        System.out.print("a");
        if (false) {
            throw new IndexOutOfBoundsException();
        }
    }
    private static void doB() throws FileNotFoundException {
        System.out.print("b");
        if (true) {
            throw new FileNotFoundException();
        }
    }
}
```

What is the result?

- A. The compilation fails.
- B. abdf
- C. abd
- D. adf
- E. abcd

Answer: E**NEW QUESTION 169**

Given:

```
public class Over {
    public void analyze(Object[] o){
        System.out.println("I am an object array");
    }
    public void analyze(long[] l){
        System.out.println("I am an array");
    }
    public void analyze(Object o){
        System.out.println("I am an object");
    }
    public static void main(String[] args) {
        int[] nums = new int[10];
        new Over().analyze(nums); // line 1
    }
}
```

What is the output?

- A. I am an object array
- B. The compilation fails due to an error in line 1.
- C. I am an array
- D. I am an object

Answer: D**NEW QUESTION 174**

Given:

```
List<Reader> dataFiles = new ArrayList<>();
File indexFile = new File("MyIndex.idx");
try (BufferedReader indexReader =
    new BufferedReader(new FileReader(indexFile))) {
    for(String file = indexReader.readLine(); file != null;
        file = indexReader.readLine()) {
        BufferedReader dataReader = new BufferedReader (
            new FileReader(new File(file))); // Line 1
        dataFiles.add(dataReader); // Line 2
        processData(dataReader); // Line 3
    }
} catch (IOException ex) {
    ...
} finally {
    for(Reader r : dataFiles) {
        try {
            r.close();
        } catch (IOException ex) {
            ...
        } // Line 4
    }
}
```

What will secure this code from a potential Denial of Service condition?

- A. After Line 4, add indexReader.close().
- B. On Line 3, enclose processData(dataReader) with try with resources.
- C. After Line 3, add dataReader.close().
- D. On Line 1, use try with resources when opening each dataReader.
- E. Before Line 1, check the size of dataFiles to make sure it does not exceed a threshold.

Answer: B

NEW QUESTION 179

Given the contents:

MessageBundle.properties file: message=Hello MessageBundle_en.properties file: message=Hello (en) MessageBundle_US.properties file: message=Hello (US)

MessageBundle_en_US.properties file: message=Hello (en_US) MessageBundle_fr_FR.properties file: message=Bonjour

and the code fragment: Locale.setDefault(Locale.FRANCE);

Locale currentLocale = new Locale.Builder().setLanguage("en").build();

ResourceBundle messages = ResourceBundle.getBundle("MessageBundle", currentLocale); System.out. println(messages.getString("message"));

Which file will display the content on executing the code fragment?

- A. MessageBundle_en_US.properties
- B. MessageBundle_en.properties
- C. MessageBundle_fr_FR.properties
- D. MessageBundle_US.properties
- E. MessageBundle.properties

Answer: C

NEW QUESTION 184

Given:

```
public class Main {
    public static void main(String[] args) {
        for(int i = 0; i < args.length; i++) {
            System.out.println(i + "). " + args[i]);
            switch(args[i]) {
                case "one":
                    continue;
                case "two":
                    i--;
                    continue;
                default:
                    break;
            }
        }
    }
}
```

executed with this command: java Main one two three What is the result?

- A. 0). one

- B. 0). one1). two2). three
- C. The compilation fails.
- D. It creates an infinite loop printing:0). one1). two1). two...
- E. A java.lang.NullPointerException is thrown.

Answer: D

NEW QUESTION 188

Which code fragment compiles?

```
A. Comparator comparator = new Comparator<?>() {  
    public int compare(Integer i, Integer j) {  
        return i.compareTo(j);  
    }  
};  
  
B. var comparator = new Comparator<>() {  
    public int compare(Integer i, Integer j) {  
        return i.compareTo(j);  
    }  
};  
  
C. Comparator<> comparator = new Comparator<Integer>() {  
    public int compare(Integer i, Integer j) {  
        return i.compareTo(j);  
    }  
};  
  
D. Comparator<Integer> comparator = new Comparator<>() {  
    public int compare(Integer i, Integer j) {  
        return i.compareTo(j);  
    }  
};
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: D

Explanation:

```
1 import java.io.*;  
2 import java.util.*;  
3 class abc {  
4     public static void main(String[] args) {  
5  
6         Comparator<Integer> comparator = new Comparator<>() {  
7             public int compare(Integer i, Integer j) {  
8                 return i.compareTo(j);  
9             }  
10        };  
11    }  
12 }  
13 }|  
14
```

NEW QUESTION 189

Given:

```
for(var i = 0; i < 10; i++) {  
    switch(i%5) {  
        case 2:  
            i *= i;  
            break;  
        case 3:  
            i++;  
            break;  
        case 1:  
        case 4:  
            i++;  
            continue;  
        default:  
            break;  
    }  
    System.out.print(i + " ");  
    i++;  
}
```

What is the result?

- A. nothing
- B. 10
- C. 0 4 9

Answer: A

NEW QUESTION 193

Given:

```
public class Foo {  
    public static void main(String... args) {  
        for (var x : args) {  
            System.out.println(x);  
        }  
    }  
}
```

What is the type of the local variable x?

- A. Character
- B. char
- C. String[]
- D. String

Answer: D

NEW QUESTION 198

.....

Thank You for Trying Our Product

We offer two products:

1st - We have Practice Tests Software with Actual Exam Questions

2nd - Questions and Answers in PDF Format

1Z0-819 Practice Exam Features:

- * 1Z0-819 Questions and Answers Updated Frequently
- * 1Z0-819 Practice Questions Verified by Expert Senior Certified Staff
- * 1Z0-819 Most Realistic Questions that Guarantee you a Pass on Your FirstTry
- * 1Z0-819 Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year

100% Actual & Verified — Instant Download, Please Click
[Order The 1Z0-819 Practice Test Here](#)