Given the following code:

```
public static void main(String[] args){
    String[] planets = {"Mercury", "Venus", "Earth", "Mars"};

    System.out.println(planets.length);
    System.out.println(planets[1].length());
}
```

What is the output?

A.

4

4

В.

3

**C**.

7

D.

5

4

E.

4 5

F.

4

21

You are developing a banking module. You have developed a class named ccMask that has a masked method.

Given the code fragment:

```
class CCMask {
   public static String maskCC(String creditCard) {
      String x = "xxxx-xxxx-xxxx-";
      //line n1
   }
   public static void main(String[] args) {
      System.out.println(maskCC("1234-5678-9101-1121"));
   }
}
```

You must ensure that the maskcc method returns a string that hides all digits of the credit card number except the four last digits (and the hyphens that separate each group of four digits).

Which two code fragments should you use at line n1, independently, to achieve this requirement?

```
    A) StringBuilder sb = new StringBuilder(creditCard); sb.substring(15, 19); return x + sb;
    B) return x + creditCard.substring(15, 19);
    C) StringBuilder sb = new StringBuilder(x); sb.append(creditCard, 15, 19); return sb.toString();
    D) StringBuilder sb = new StringBuilder(creditCard); StringBuilder s = sb.insert(0, x); return s.toString();
```

#### A.

Option A

### В.

Option B

#### C.

Option C

#### D.

Option D

Given the code fragment:

```
public static void main(String[] args) {
    ArrayList myList = new ArrayList();
    String[] myArray;
    try {
        while (true) {
            myList.add("My String");
        }
    }
    catch (RuntimeException re) {
        System.out.println("Caught a RuntimeException");
    }
    catch (Exception e) {
        System.out.println("Caught an Exception");
    }
    System.out.println("Ready to use");
}
```

- **A.** Execution terminates in the first catch statement, and caught a RuntimeException is printed to the console.
- **B.** Execution terminates in the second catch statement, and caught an Exception is printed to the console.
- C. A runtime error is thrown in the thread "main".
- **D.** Execution completes normally, and Ready to use is printed to the console.
- **E.** The code fails to compile because a throws keyword is required.

# Given:

```
System.out.println("5 + 2 = " + 3 + 4);
System.out.println("5 + 2 = " + (3 + 4));
```

- $\circ$  A) 5 + 2 = 34 5 + 2 = 34
- CB) 5 + 2 + 3 + 4 5 + 2 = 7
- CC) 7 = 7 7 + 7
- OD) 5 + 2 = 345 + 2 = 7
- A. Option A
- **B.** Option B
- C. Option C
- **D.** Option D

Given the code fragment:

```
public static void main(String[] args) {
    String[][] arr = {{"A", "B", "C"}, {"D", "E"}};
    for (int i = 0; i < arr.length; i++) {
        for (int j = 0; j < arr[i].length; j++) {
            System.out.print(arr[i][j] + " ");
            if (arr[i][j].equals("B")) {
                 break;
            }
        }
        continue;
    }
}</pre>
```

- **A.** A B C
- B. ABCDE
- C. ABDE
- D. Compilation fails.

Given the code fragment:

```
public static void main(String[] args) {
   String str = " ";
   str.trim();
   System.out.println(str.equals("") + " " + str.isEmpty());
}
```

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

Given the code fragment:

```
public class App {
    public static void main(String[] args) {
        String str1 = "Java";
        String str2 = new String("java");
        //line n1
        {
            System.out.println("Equal");
        } else {
            System.out.println("Not Equal");
        }
    }
}
```

Which code fragment, when inserted at line n1, enables the App class to print Equal?

```
C A) String str3 = str2;
   if (str1 == str3)
C B) if (str1.equalsIgnoreCase(str2))
C C) String str3 = str2;
   if (str1.equals(str3))
C D) if (str1.toLowerCase() == str2.toLowerCase())
```

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

```
Given:
```

```
public class SumTest {
   public static void doSum(Integer x, Integer y) {
        System.out.println("Integer sum is " + (x + y));
   }
   public static void doSum(double x, double y) {
        System.out.println("double sum is " + (x + y));
   }
   public static void doSum(float x, float y) {
        System.out.println("float sum is " + (x + y));
   }
   public static void doSum(int x, int y) {
        System.out.println("int sum is " + (x + y));
   }
   public static void main(String[] args) {
        doSum(10, 20);
        doSum(10.0, 20.0);
   }
}
```

- OA) int sum is 30 float sum is 30.0
- CB) int sum is 30 double sum is 30
- CC) Integer sum is 30 double sum is 30.0
- CD) Integer sum is 30 float sum is 30.0
- A. Option A
- B. Option B
- C. Option C
- D. Option D

Given the code fragment:

```
String[] strs = new String[2];
int idx = 0;
for (String s : strs) {
        strs[idx].concat(" element " + idx);
        idx++;
}
for (idx = 0; idx < strs.length; idx++) {
        System.out.println(strs[idx]);
}</pre>
```

What is the result?

## A.

Element 0 Element 1

## В.

Null element 0 Null element 1

## C.

Null

Null

## D.

A NullPointerException is thrown at runtime.

Given the code fragment:

```
3. public static void main(String[] args) {
 4.
       int iVar = 100;
       float fVar = 100.100f;
5.
       double dVar = 123;
 6.
       iVar = fVar;
 7.
 8.
       fVar = iVar;
 9.
       dVar = fVar;
       fVar = dVar;
10.
11.
       dVar = iVar;
12.
       iVar = dVar;
13. }
```

Which three lines fail to compile?

- **A.** Line 7
- B. Line 8
- **C.** Line 9
- **D.** Line 10
- **E.** Line 11
- **F.** Line 12

Given:

```
MainTest.java:
public class MainTest {
    public static void main(int[] args) {
        System.out.println("int main " + args[0]);
    }
    public static void main(Object[] args) {
        System.out.println("Object main " + args[0]);
    }
    public static void main(String[] args) {
        System.out.println("String main " + args[0]);
    }
}
and commands:
javac MainTest.java
java MainTest 1 2 3
```

- A. int main 1
- B. Object main 1
- C. String main 1
- D. Compilation fails
- **E.** An exception is thrown at runtime

Given the code fragment:

```
int num[][] = new int[1][3];
for (int i = 0; i < num.length; i++) {
    for (int j = 0; j < num[i].length; j++) {
        num[i][j] = 10;
    }
}</pre>
```

Which option represents the state of the num array after successful completion of the outer loop?

- C A) num[0][0]=10 num[0][1]=10 num[0][2]=10
- C B) num[0][0]=10 num[1][0]=10 num[2][0]=10
- CC) num[0][0]=10 num[0][1]=0 num[0][2]=0
- C D) num[0][0]=10 num[0][1]=10 num[0][2]=10 num[0][3]=10 num[1][0]=0 num[1][1]=0 num[1][2]=0 num[1][3]=0
- **A.** Option A
- **B.** Option B
- C. Option C
- **D.** Option D

Given the code fragment:

```
public class Person {
    String name;
    int age = 25;
    public Person(String name) {
       this();
                                                 //line n1
        setName (name);
    public Person(String name, int age) {
                   ActualTests
                                                 //line n2
        Person(name);
        setAge (age);
    }
   //setter and getter methods go here
   public String show() {
        return name + " " + age + " " + number ;
    public static void main(String[] args) {
        Person p1 = new Person("Jesse");
        Person p2 = new Person("Walter",52);
        System.out.println(p1.show());
        System.out.println(p2.show());
```

What is the result?

### A.

Jesse 25

Walter 52

- B. Compilation fails only at line n1
- C. Compilation fails only at line n2
- **D.** Compilation fails at both line n1 and line n2

Given the following code:

```
int[] intArr = {15, 30, 45, 60, 75};
intArr[2] = intArr[4];
intArr[4] = 90;
```

What are the values of each element in intArr after this code has executed?

- **A.** 15, 60, 45, 90, 75
- **B.** 15, 90, 45, 90, 75
- **C.** 15, 30, 75, 60, 90
- **D.** 15, 30, 90, 60, 90
- **E.** 15, 4, 45, 60, 90

Given the following array:

```
int[] intArr = {8, 16, 32, 64, 128};
```

Which two code fragments, independently, print each element in this array?

```
☐ A) for (int i : intArr) {
         System.out.print(intArr[i] +" ");
     }
☐ B) for (int i : intArr) {
         System.out.print(i +" ");
     }
\square C) for (int i=0 : intArr) {
         System.out.print(intArr[i] +" ");
         i++;
□ D) for (int i=0; i < intArr.length; i++) {
         System.out.print(i +" ");
     }
\square E) for (int i=0; i < intArr.length; i++) {
         System.out.print(intArr[i] +" ");
     }
☐ F) for (int i; i < intArr.length; i++) {
         System.out.print(intArr[i] +" ");
     }
```

- A. Option A
- **B.** Option B
- C. Option C
- **D.** Option D
- E. Option E
- **F.** Option F

Given the content of three files:

```
A.java:

public class A {
    public void a() {}
    int a;
}

B.java:

public class B {
    private int doStuff() {
        private int x = 100;
        return x++;
    }
}

C.java:

import java.io.*;
package p1;
class A {
    public void main(String fileName) throws IOException { }
}
```

Which statement is true?

- **A.** Only the A.Java file compiles successfully.
- **B.** Only the B.java file compiles successfully.
- **C.** Only the C.java file compiles successfully.
- **D.** The A.Java and B.java files compile successfully.
- **E.** The B.java and C.java files compile successfully.
- **F.** The A.Java and C.java files compile successfully.

Given the code fragment:

```
int[] array = \{1, 2, 3, 4, 5\};
```

And given the requirements:

Process all the elements of the array in the order of entry.

Process all the elements of the array in the reverse order of entry.

Process alternating elements of the array in the order of entry.

Which two statements are true?

- **A.** Requirements 1, 2, and 3 can be implemented by using the enhanced for loop.
- **B.** Requirements 1, 2, and 3 can be implemented by using the standard for loop.
- **C.** Requirements 2 and 3 CANNOT be implemented by using the standard for loop.
- **D.** Requirement 1 can be implemented by using the enhanced for loop.
- **E.** Requirement 3 CANNOT be implemented by using either the enhanced for loop or the standard for loop.

Given:

```
public class TestScope {
    public static void main(String[] args) {
        int var1 = 200;
        System.out.print(doCalc(var1));
        System.out.print(" "+var1);
    }
    static int doCalc(int var1) {
        var1 = var1 * 2;
        return var1;
    }
}
```

What is the result?

- **A.** 400 200
- **B.** 200 200
- **C.** 400 400
- **D.** Compilation fails.

#### **QUESTION NO: 67**

Which statement is true about Java byte code?

- **A.** It can run on any platform.
- **B.** It can run on any platform only if it was compiled for that platform.
- C. It can run on any platform that has the Java Runtime Environment.
- **D.** It can run on any platform that has a Java compiler.
- **E.** It can run on any platform only if that platform has both the Java Runtime Environment and a Java compiler.

Given:

```
public class MarkList {
   int num;
   public static void graceMarks(MarkList obj4) {
      obj4.num += 10;
   }
   public static void main(String[] args) {
      MarkList obj1 = new MarkList();
      MarkList obj2 = obj1;
      MarkList obj3 = null;
      obj2.num = 60;
      graceMarks(obj2);
   }
}
```

How many MarkList instances are created in memory at runtime?

- **A.** 1
- **B.** 2
- **C.** 3
- **D**. 4