QUESTION NO: 1

Given the code fragment:

```
int[][] array2D = { {0,1,2}, {3,4,5,6} };

System.out.print(array2D[0].length + " ");
System.out.print(array2D[1].getClass().isArray() + " ");
System.out.println(array2D[0][1]);
```


What is the result?

A. 3 false 1

B. 2 true 3

C. false 3

D. true 1

E. 3 false 3

F. 2true 1

G. 2 false 1

QUESTION NO: 2

View the exhibit:

```
public class Student {
     public String name = "";
     public int age = 0;
     public String major = "Undeclared";
     public boolean fulltime = true;

     public void display(){
          System.out.println("Name: " + name + " Major: " + major);
     }

     public boolean isFulltime(){
          return fulltime;
     }
}
```

Given:

```
public class TestStudent {

     public static void main(String[] args) {
          Student bob = new Student();
          Student jian = new Student();

          bob.name = "Bob";
          bob.age = 19;
          jian = bob;
          jian.name = "Jian";
          System.out.println("Bob's Name: " + bob.name);
     }
}
```

What is the result when this program is executed?

A. Bob's Name: Bob

B. Bob's Name: Jian

C. Nothing prints

D. Bob's name

QUESTION NO: 3

Given the code fragment:

```
String valid = "true";
if (valid) System.out.println("valid");
else       System.out.println("not valid");
```


What is the result?

A. Valid

B. Not valid

C. Compilation fails

D. An IllegalArgumentException is thrown at run time

QUESTION NO: 4

Given:

```
public class ScopeTest {
     int z;
     public static void main(String[] args) {
          ScopeTest myScope = new ScopeTest();
          int z = 6;
          System.out.println(z);
          myScope.doStuff();
          System.out.println(z);
          System.out.println(myScope.z);
     }
     void doStuff() {
          int z = 5;
          doStuff2();
          System.out.println(z);
     }
     void doStuff2() {
          z = 4;
     }
}
```


What is the result?

A.
6
5
6
4

B.
6
5
5
4

C.
6
5
6
6

D.
6
5
6
5

QUESTION NO: 5

Which two are valid instantiations and initializations of a multi dimensional array?

A)
```
int[][] array2D = { {0,1,2,4}, {5,6} };
```

B)
```
int[][] array2D = new int [][2];
array2D[0][0] = 1;
array2D[0][1] = 2;
array2D[1][0] = 3;
array2D[1][1] = 4;
```

C)
```
int[][][] array3D = { {0,1}, {2,3}, {4,5} };
```

D)
```
int[] array = {0,1};
int[][][] array3D = new int[2][2][2];
array3D[0][0] = array;
array3D[0][1] = array;
array3D[1][0] = array;
array3D[1][1] = array;
```

E)
```
int[][] array2D = { 0,1 }
```


A. Option A

B. Option B

C. Option C

D. Option D

E. Option E

QUESTION NO: 6

An unchecked exception occurs in a method dosomething()

Should other code be added in the dosomething() method for it to compile and execute?

A. The Exception must be caught

B. The Exception must be declared to be thrown.

C. The Exception must be caught or declared to be thrown.

D. No other code needs to be added.

QUESTION NO: 7

Given the code fragment:

```
int b = 4;
b--;
System.out.println(--b);
System.out.println(b);
```


What is the result?

A.
2
2

B.
1
2

C.
3
2

D.
3
3

QUESTION NO: 9

Given the code fragment:

```
Int [] [] array = {{0}, {0, 1}, {0, 2, 4}, {0, 3, 6, 9}, {0, 4, 8, 12, 16}};
Systemout.printIn(array [4] [1]);
System.out.printIn (array) [1] [4]);
```

What is the result?

A.
4
Null

B.
Null
4

C.
An IllegalArgumentException is thrown at run time

D.
4
AnArrayIndexOutOfBoundException is thrown at run time

QUESTION NO: 10

Given:

```
public class DoCompare1 {
    public static void main(String[] args) {
        String[] table = {"aa", "bb", "cc"};
        for (String ss: table) {
            int ii = 0;
            while(ii < table.length) {
                System.out.println(ss + ", " + ii);
                ii++;
            }
        }
    }
}
```


How many times is 2 printed as a part of the output?

A. Zero

B. Once

C. Twice

D. Thrice

E. Compilation fails.

QUESTION NO: 11

Given:

```
import java.io.IOException;

public class Y {
    public static void main(String[] args) {
        try {
            doSomething();
        }
        catch (RuntimeException e) {
            System.out.println(e);
        }
    }
    static void doSomething() {
        if (Math.random() > 0.5) throw new IOException();
        throw new RuntimeException();
    }
}
```


Which two actions, used independently, will permit this class to compile?

A. Adding throws IOException to the main() method signature

B. Adding throws IOException to the doSoomething() method signature

C. Adding throws IOException to the main() method signature and to the dosomething() method

D. Adding throws IOException to the dosomething() method signature and changing the catch argument to IOException

E. Adding throws IOException to the main() method signature and changing the catch argument to IOException

QUESTION NO: 12

Given:

```
class X {
     String str = "default";
     X(String s) { str = s; }
     void print() { System.out.println(str); }
     public static void main(String[] args) {
          new X("hello").print();
     }
}
```


What is the result?

A. Hello

B. Default

C. Compilation fails

D. The program prints nothing

E. An exception is thrown at run time

QUESTION NO: 14

Given the code fragment:

System.out.printIn("Result: " + 2 + 3 + 5);

System.out.printIn("Result: " + 2 + 3 * 5);

What is the result?

A.
Result: 10
Result: 30

B.
Result: 10
Result: 25

C.
Result: 235
Result: 215

D.
Result: 215
Result: 215

E.
Compilation fails

QUESTION NO: 16

Given the code fragment:

```
int a = 0; a++;

System.out.printIn(a++);

System.out.printIn(a);
```

What is the result?

A.
1
2

B.
0
1

C.
1
1

D.
2
2

QUESTION NO: 17

Given:

```
public class X {
     public static void main(String[] args) {
          String theString = "Hello World";
          System.out.println(theString.charAt(11));
     }
}
```


What is the result?

A. There is no output

B. d is output

C. A StringIndexOutOfBoundsException is thrown at runtime

D. An ArrayIndexOutOfBoundsException is thrown at runtime

E. A NullPointException is thrown at runtime

F. A StringArrayIndexOutOfBoundsException is thrown at runtime

QUESTION NO: 19

Given:

```
package handy.dandy;
public class Keystroke {
    public void typeExclamation(){
        System.out.println("!");
    }
}
```

and

```
1.  package handy;
2.  public class Greet {
3.      public static void main{String[] args) {
4.          String greeting = "Hello";
5.          System.out.print(greeting);
6.          Keystroke stroke = new Keystroke();
7.          stroke.typeExclamation();
8.      }
9.  }
```


What three modifications, made independently, made to class greet, enable the code to compile and run?

A. line 6 replaced with handy.dandy.keystroke stroke = new KeyStroke ( );

B. line 6 replacedwith handy.*.KeyStroke = new KeyStroke ( );

C. line 6 replaced with handy.dandy.KeyStroke Stroke = new handy.dandy.KeyStroke();

D. import handy.*; added before line 1

E. import handy.dandy.*; added after line 1

F. import handy.dandy,KeyStroke; added afterline 1

G. import handy.dandy.KeyStroke.typeException(); added before line 1

QUESTION NO: 20

Given:

```
String message1 = "Wham bam!";
String message2 = new String("Wham bam!");

if (message1 == message2)
    System.out.println("They match");

if (message1.equals(message2))
    System.out.println("They really match");
```


What is the result?

A.
They match
They really match

B.
They really match

C.
They match

D.
Nothing Prints

E.
They really match
They really match

QUESTION NO: 21

Given the code fragment:

String h1 = "Bob";

String h2 = new String ("Bob");

What is the best way to test that the values of h1 and h2 are the same?

A. if (h1 = = h2)

B. if (h1.equals(h2))

C. if (h1 = = h2)

D. if (h1.same(h2))

QUESTION NO: 22

Which two are valid declarations of a two-dimensional array?

A. int [] [] array2D;

B. int [2] [2] array2D;

C. int array2D [];

D. int [] array2D [];

E. int [] [] array2D [];

QUESTION NO: 23

Given the code fragment:

System.out.printIn ("Result: " +3+5);

System.out.printIn ("Result: " + (3+5));

What is the result?

A.
Result: 8
Result: 8

B.
Result: 35
Result: 8

C.
Result: 8
Result: 35

D.
Result: 35
Result: 35

QUESTION NO: 25

A method doSomething() that has no exception handling code is modified to trail a method that throws a checked exception. Which two modifications, made independently, will allow the program to compile?

A. Catch the exception in the method doSomething().

B. Declare the exception to be thrown in the doSomething() method signature.

C. Cast the exception to a RunTimeException in the doSomething() method.

D. Catch the exception in the method that calls doSomething().

QUESTION NO: 26

Given the code fragment:

```
String color = "Red";

switch (color) {
     case "Red":
          System.out.println("Found Red");
     case "Blue":
          System.out.println("Found Blue");
          break;
     case "White":
          System.out.println("Found White");
          break;
     default:
          System.out.println("Found Default");
}
```


What is the result?

A.
Found Red

B.
Found Red
Found Blue

C.
Found Red
Found Blue
Found White

D.
Found Red
Found Blue

QUESTION NO: 31

Given:

```
public static void main(String[] args) {

     int a, b, c = 0;
     int a, b, c;
     int g, int h, int i = 0;
     int d, e, F;
     Int k, l, m = 0;
```


Which two declarations will compile?

A. int a, b, c = 0;

B. int a, b, c;

C. int g, int h, int i = 0;

D. int d, e, F;

E. int k, l, m; = 0;

QUESTION NO: 32

Given the code fragment:

```
int j=0, k=0;

for(int i=0; i < x; i++) {
     do {
          k = 0;
          while (k < z) {
               k++;
               System.out.print(k + " ");
          }
          System.out.println(" ");
          j++;
     } while (j < y);
     System.out.println("---");
}
```


What values of x, y, z will produce the following result?

1 2 3 4

1 2 3 4

1 2 3 4

---

1 2 3 4

A. X = 4, Y = 3, Z = 2

B. X = 3, Y = 2, Z = 3

C. X = 2, Y = 3, Z = 3

D. X = 4, Y = 2, Z = 3

E. X = 2, Y = 3, Z = 4

QUESTION NO: 34

Given:

```
public class DoCompare4 {
    public static void main(String[] args) {
        String[] table = {"aa", "bb", "cc"};
        int ii = 0;
        do
            while (ii < table.length)
                System.out.println(ii++);
        while (ii < table.length);
    }
}
```


What is the result?

A.
0

B.
0
1
2

C.
0
1
2
0
1
2
0
1
2

D.
Compilation fails

QUESTION NO: 35

A method is declared to take three arguments. A program calls this method and passes only two arguments. What is the result?

A. Compilation fails.

B. The third argument is given the value null.

C. The third argument is given the value void.

D. The third argument is given the value zero.

E. The third argument is given the appropriate false value for its declared type.

F. An exception occurs when the method attempts to access the third argument.

QUESTION NO: 37

Given the following code fragment:

```
if (value >= 0) {
    if (value != 0)
        System.out.print("the ");
    else
        System.out.print("quick ");
    if (value < 10)
        System.out.print("brown ");
    if (value > 30)
        System.out.print("fox ");
    else if (value < 50)
        System.out.print("jumps ");
    else if (value < 10)
        System.out.print("over ");
    else
        System.out.print("the ");
    if (value > 10)
        System.out.print("lazy ");
} else {
    System.out.print("dog ");
}
System.out.println( "..." );
```


What is the result if the integer value is 33?

A. The fox jump lazy …

B. The fox lazy …

C. Quick fox over lazy …

D. Quick fox the ….

QUESTION NO: 38

Which three are advantages of the Java exception mechanism?

A. Improves the program structure because the error handling code is separated from the normal program function

B. Provides a set of standard exceptions that covers all the possible errors

C. Improves the program structure because the programmer can choose where to handle exceptions

D. Improves the program structure because exceptions must be handled in the method in which they occurred

E. Allows the creation of new exceptions that are tailored to the particular program being

QUESTION NO: 39

Given:

```
public class MyFor3 {
    public static void main(String[] args) {
        int[] xx = null;
        for (int ii: xx) {
            System.out.println(ii);
        }
    }
}
```


What is the result?

A. null

B. compilation fails

C. Java.lang.NullPointerException

D. 0

QUESTION NO: 40

Given:

```
public class Main {
    public static void main(String[] args) {
        doSomething();
    }
    private static void doSomething() {
        doSomethingElse();
    }
    private static void doSomethingElse() {
        throw new Exception();
    }
}
```


Which approach ensures that the class can be compiled and run?

A. Put the throw new Exception() statement in the try block of try – catch

B. Put the doSomethingElse() methodin the try block of a try – catch

C. Put the doSomething() method in the try block of a try – catch

D. Put the doSomething() method and the doSomethingElse() method in the try block of a try – catch

QUESTION NO: 41

Given:

```
public class ScopeTest1 {
    public static void main(String[] args) {
        doStuff();                          // line x1
        int x1 = x2;                        // line x2
        int x2 = j;                         // line x3
    }
    static void doStuff() {
        System.out.println(j)               // line x4
    }
    static int  j;
}
```


Which line causes a compilation error?

A. line x1

B. line x2

C. line x3

D. line x4

QUESTION NO: 42

Given:

```
class Overloading {
    void x(int i) {
        System.out.println(”one”);
    }

    void x(String s) {
        System.out.println(”two”);
    }

    void x(double d) {
        System.out.println(”three”);
    }

    public static void main(String[] args) {
        new Overloading().x(4.0);
    }
}
```


What is the result?

A. One

B. Two

C. Three

D. Compilation fails

QUESTION NO: 43

Which declaration initializes a boolean variable?

A. boolean h = 1;

B. boolean k = 0;

C. boolean m = null;

D. boolean j = (1 < 5);

QUESTION NO: 47

Given the following code:

```
1.  public class Simple {
2.  public float price;
3.  public static void main(String[] args) {
4.  Simple price = new Simple();
5.  price = 4;
6.  }
7   }
```


What will make this code compile and run?

A.
Change line 2 to the following:
public int price

B.
Change line 4 to the following:
int price = new Simple();

C.
Change line 4 to the following:
Float price = new Simple ();

D.
Change line 5 to the following:
price = 4f;

E.
Change line 5 to the following:
price.price = 4;

F.
Change line 5 to the following:
Price = (float) 4:

G.
Change line 5 to the following:
Price = (Simple) 4;

H.
The code compiles and runs properly; no changes are necessary

QUESTION NO: 48

Given:

```
public class DoWhile1 {
    public static void main(String[] args) {
        int ii = 2;
        do {
            System.out.println(ii);
        } while (--ii);
    }
}
```


What is the result?

A.
2
1

B.
2
1
0

C. null

D. An infinite loop

E. Compilation fails

QUESTION NO: 50

Identify two benefits of using ArrayList over array in software development.

A. Reduces memory footprint

B. Implements the Collection API

C. Is multithread safe

D. Dynamically resizes based on the number of elements in the list

QUESTION NO: 51

Which three are valid types for switch?

A. int

B. float

C. double

D. Integer

E. String

F. Float

QUESTION NO: 59

Which two will compile, and can be run successfully using the command:

java fred1 hello walls

A)
```
class fred1 {
    public static void main(String args) {
        System.out.println(args[1]);
    }
}
```

B)
```
class fred1 {
    public static void main(String[] args) {
        System.out.println(args[2]);
    }
}
```


C)
```
class fred1 {
    public static void main(String[] args) {
        System.out.println(args);
    }
}
```

D)
```
class fred1 {
    public static void main(String[] args) {
        System.out.println(args[1]);
    }
}
```

A. Option A

B. Option B

C. Option C

D. Option D

QUESTION NO: 63

Given:

```
class Overloading {
    int x(double d) {
        System.out.println("one");
        return 0;
    }

    String x(double d) {
        System.out.println("two");
        return null;
    }

    double x(double d) {
        System.out.println("three");
        return 0.0;
    }

    public static void main(String[] args) {
        new Overloading().x(4.0);
    }
}
```


What is the result?

A. One

B. Two

C. Three

D. Compilation fails

QUESTION NO: 65

Given the code fragment:

```
1. ArrayList<Integer> list = new ArrayList<>(1);
2. list.add(1001);
3. list.add(1002);
4. System.out.println(list.get(list.size()));
```

What is the result?

A. Compilation fails due to an error on line 1.

B. An exception is thrown at run time due to error on line 3

C. An exception is thrown at run time due to error on line 4

D. 1002

QUESTION NO: 70

Given:

```
public class DoBreak1 {
    public static void main(String[] args) {
        String[] table = {"aa", "bb", "cc", "dd"};
        for (String ss: table) {
            if ( "bb".equals(ss)) {
                continue;
                }
            System.out.println(ss);
            if ( "cc".equals(ss)) {
                break;
            }
        }
    }
}
```


What is the result?

A.
aa
cc

B.
aa
bb
cc

C.
cc
dd

D.
cc

E.
Compilation fails.

QUESTION NO: 71

```
1. class StaticMethods {
2.      static void one() {
3.          two();
4.          StaticMethods.two();
5.          three();
6.          StaticMethods.four();
7.      }
8.      static void two() { }
9.      void three() {
10.         one();
11.         StaticMethods.two();
12.         four();
13.         StaticMethods.four();
14.     }
15.     void four() { }
16. }
```


Which three lines are illegal?

A. line 3

B. line 4

C. line 5

D. line 6

E. line 10

F. line 11

G. line 12

H. line 13

QUESTION NO: 73

View the exhibit:

```
public class Student {
    public String name = "";
    public int age = 0;
    public String major = "Undeclared";
    public boolean fulltime = true;
    public void display() {
        System.out.println("Name: " + name + " Major: " + major); }
            public boolean isFullTime() {
                return fulltime;
            }
        }
```


Given:

```
Public class TestStudent {
    public static void main(String[] args) {
        Student bob = new Student ();
        bob.name = "Bob";
        bob.age = 18;
        bob.year = 1982;
    }
}
```

What is the result?

A. Year is set to 1982.

B. bob.year is set to 1982

C. A runtime error is generated.

D. A compile time error is generated.

QUESTION NO: 76

View the exhibit:

```
public class Student {
    public String name = "";
    public int age = 0;
    public String major = "Undeclared";
    public boolean fulltime = true;
    public void display() {
        System.out.println("Name: " + name + " Major: " + major);
    }
    public boolean isFullTime() {
        return fulltime;
    }
}
```

Which line of code initializes a student instance?

A. Student student1;

B. Student student1 = Student.new();

C. Student student1 = new Student();

D. Student student1 = Student();

QUESTION NO: 77

```
int [] array = {1,2,3,4,5};
for (int i: array) {
    if ( i < 2) {
        keyword1 ;
    }
    System.out.println(i);
    if ( i == 3) {
        keyword2 ;
    }
}
```

What should keyword1 and keyword2 be respectively, in order to produce output 2345?

A. continue, break

B. break, break

C. break, continue

D. continue, continue

QUESTION NO: 78

```
int i, j=0;
i = (3* 2 +4 +5 ) ;
j = (3 * ((2+4) + 5));
System.out.println("i:"+ i + "\nj":+j);
```

What is the result?

A. i: 16
j: 33

B. i: 15
j: 33

C. i: 33
j: 23

D. i: 15
j: 23

A.
Option A

B.
Option B

C.
Option C

D.
Option D

QUESTION NO: 79

```
boolean log3 = ( 5.0 != 6.0) && ( 4 != 5);
boolean log4 = (4 != 4) || (4 == 4);
System.out.println("log3:"+ log3 + \nlog4" + log4);
```

What is the result?

A.
log3:false

log4:true

B.
log3:true

log4:true

C.
log3:true

log4:false

D.
log3:false

log4:false

QUESTION NO: 81

```
Class StaticField {
     static int i = 7;
     public static void main(String[] args) {
          StaticFied obj = new StaticField();
          obj.i++;
          StaticField.i++;
          obj.i++;
          System.out.println(StaticField.i + " "+ obj.i);
     }
}
```


What is the result?

A.
10 10

B.
8 9

C.
9 8

D.
7 10

QUESTION NO: 82

Which two are valid array declaration?

A. Object array[];

B. Boolean array[3];

C. int[] array;

D. Float[2] array;

QUESTION NO: 84

Given:

```
public class MainMethod {
     void main() {
          System.out.println("one");
     }
     static void main(String args) {
          System.out.println("two");
     }
     public static void main(String[] args) {
          System.out.println("three");
     }
     void mina(Object[] args) {
          System.out.println("four");
     }
}
```


What is printed out when the program is executed?

A. one

B. two

C. three

D. four

QUESTION NO: 85

```
public class ScopeTest {
     int j, int k;
     public static void main(String[] args) {
          ew ScopeTest().doStuff();
     }
     void doStuff() {
          nt x = 5;
          oStuff2();
          System.out.println("x");
     }
     void doStuff2() {
          nt y = 7;
          ystem.out.println("y");
          or (int z = 0; z < 5; z++) {
               ystem.out.println("z");
               ystem.out.println("y");
          }
     }
}
```


Which two items are fields?

A. j

B. k

C. x

D. y

E. z

QUESTION NO: 86

A method is declared to take three arguments. A program calls this method and passes only two arguments. What is the results?

A. Compilation fails.

B. The third argument is given the value null.

C. The third argument is given the value void.

D. The third argument is given the value zero.

E. The third argument is given the appropriate false value for its declared type.

F. An exception occurs when the method attempts to access the third argument.

QUESTION NO: 87

```
public class ForTest {
     public static void main(String[] args) {
          int[] arrar = {1,2,3};
               for ( foo ) {
          }
     }
}
```


Which three are valid replacements for foo so that the program will compiled and run?

A. int i:array

B. int i = 0; i < 1; i++

C. ;;

D. ; i < 1; i++

E. ; i < 1;

QUESTION NO: 89

Given the code fragment:

```
int b = 3;
if ( !(b > 3)) {
     System.out.println("square ");
     }{
     System.out.println("circle ");
}
System.out.println("...");
```

What is the result?

A. square...

B. circle...

C. squarecircle...

D. Compilation fails.

QUESTION NO: 93

```
public class StringReplace {
    public static void main(String[] args) {
        String message = "Hi everyone!";
        System.out.println("message = " + message.replace("e", "X"));
    }
}
```

What is the result?

A. message = Hi everyone!

B. message = Hi XvXryonX!

C. A compile time error is produced.

D. A runtime error is produced.

E. message =

F. message = Hi Xveryone!

QUESTION NO: 95

Which three statements are benefits of encapsulation?

A. Allows a class implementation to change without changing t he clients

B. Protects confidential data from leaking out of the objects

C. Prevents code from causing exceptions

D. Enables the class implementation to protect its invariants

E. Permits classes to be combined into the same package

F. Enables multiple instances of the same class to be created safely

QUESTION NO: 96

The protected modifier on a Field declaration within a public class means that the field _____.

A. Cannot be modified

B. Can be read but not written from outside the class

C. Can be read and written from this class and its subclasses only within the same package

D. Can be read and written from this class and its subclasses defined in any package

QUESTION NO: 97

Given:

```
class Caller {
    private void init() {
        System.out.println("Initialized");
    }

    public void start() {
        init();
        System.out.println("Started");
    }
}

public class TestCall {
    public static void main(String[] args) {
        Caller c = new Caller();
        c.start();
        c.init();
    }
}
```


What is the result?

A.
Initialized

Started

B.
Initialized

Started

Initialized

C.
Compilation fails

D.
An exception is thrown at runtime

QUESTION NO: 101

Given the code fragment:

```
class Test2 {
int fvar;
static int cvar;
    public statis void main(String[] args) {
    Test2 t = new Test2();
    // insert code here to write field variables
    }
{
```


Which code fragments, inserted independently, enable the code compile?

A.
t.fvar = 200;

B.
cvar = 400;

C.
fvar = 200;

cvar = 400;

D.
this.fvar = 200;

this.cvar = 400;

E.
t.fvar = 200;

Test2.cvar = 400;

F.
this.fvar = 200;
Test2.cvar = 400;

QUESTION NO: 105

Given:

```
class Test {
     int sum = 0;
     public void doCheck(int number) {
          if (number % 2 == 0) {
               break;
          } else {
               for (int i = 0; i < number; i++) {
                    sum += i;
               }
          }
     }
     public static void main(String[] args) {
          Test obj = new Test();
          System.out.println("Red " + obj.sum);
          obj.doCheck(2);
          System.out.println("Orange " + obj.sum);
          obj.doCheck(3);
          System.out.println("Green " + obj.sum);
     }
}
```


What is the result?

A.
Red 0
Orange 0
Green 3

B.
Red 0
Orange 0
Green 6

C.
Red 0
Orange 1

D.
Green 4

E.
Compilation fails

QUESTION NO: 106

Given the code fragment:

```
String color = "teal";

switch (color) {
     case "Red":
          System.out.println("Found Red");
     case "Blue":
          System.out.println("Found Blue");
          break;
     case "Teal":
          System.out.println("Found Teal");
          break;
     default:
          System.out.println("Found Default");
}
```


What is the result?

A.
Found Red

Found Default

B.
Found Teal

C.
Found Red

Found Blue

Found Teal

D.
Found Red

Found Blue

Found Teal

Found Default

E.
Found Default

QUESTION NO: 108

Given:

```
public class Test2 {
     public static void main(String[] args) {
          int ar1[] = {2, 4, 6, 8};
          int ar2[] = {1, 3, 5, 7, 9};
          ar2 = ar1;
               for (int e2 : ar2) {
                    System.out.print(" " + e2);
          }
     }
}
```

What is the result?

A. 2 4 6 8

B. 2 4 6 8 9

C. 1 3 5 7

D. 1 3 5 7 9

QUESTION NO: 111

Given:

```
public class MyFor1 {
     public static void main(String[] args) {
          int [] x = {6, 7, 8};
          for (int i : x) {
               System.out.print(i + " ");
          }
     }
}
```

What is the result?

A. 6 7 8

B. 7 8 9

C. 0 1 2

D. 6 8 10

E. Compilation fails

QUESTION NO: 109

Given:

```
public class Calculator {
    public static void main(String[] args) {
        int num = 5;
        int sum;

        do {
            sum += num;
        } while ((num--) > 1);

        System.out.println("The sum is " + sum + ".");
    }
}
```

What is the result?

A. The sum is 2

B. The sum is 14

C. The sum is 15

D. The loop executes infinite times

E. Compilation fails

QUESTION NO: 111

Given:

```
public class App {
    public static void main(String[] args) {
        int i = 10;
        int j = 20;
        int k = j += i / 5;
        System.out.print(i + " : " + j + " : " + k);
    }
}
```

What is the result?

A. 10 : 22 : 20

B. 10 : 22 : 22

C. 10 : 22 : 6

D. 10 : 30 : 6

QUESTION NO: 112

Given the code fragment:

```
int [] 1st = {1, 2, 3, 4, 5, 4, 3, 2, 1};
int sum = 0;
for (int frnt = 0, rear = 1st.length -1;
    frnt < 5 && rear >= 5;
    frnt++, rear--) {
        sum = sum + 1st[frnt] + 1st[rear];
}
System.out.print(sum);
```

What is the result?

A. 20

B. 25

C. 29

D. Compilation fails

E. AnArrayIndexOutOfBoundsException is thrown at runtime

QUESTION NO: 113

Given:

```
public class X {
    public static void main(String[] args) {
        String theString = "Hello World";
        System.out.println(theString.charAt(11));
    }
}
```

What is the result?

A. The program prints nothing

B. d

C. A StringIndexOutOfBoundsException is thrown at runtime.

D. AnArrayIndexOutOfBoundsException is thrown at runtime.

E. A NullPointerException is thrown at runtime.

QUESTION NO: 115

Given the code fragment:

```
String[] colors = {"red", "blue", "green", "yellow", "maroon", "cyan"};
```

Which code fragment prints blue, cyan,?

A)
```
for (String c:colors) {
    if (c.length() != 4) {
        continue;
    }
System.out.print(c+", ");
}
```

B)
```
for (String c:colors[]) {
    if (c.length() <= 4) {
        continue;
    }
System.out.print(c+", ");
}
```

C)
```
for (String c:String[] colors) {
    if (c.length() >= 3) {
        continue;
    }
System.out.print(c+", ");
}
```

D)
```
for (String c:colors) {
    if (c.length() != 4) {
        System.out.print(c+", ");
        continue;
    }
}
```

A. Option A

B. Option B

C. Option C

D. Option D

QUESTION NO: 116

Given:

```
public class MyFor3 {
     public static void main(String[] args) {
          int[] xx = null;
          for (int ii : xx) {
              System.out.println(ii);
          }
     }
}
```


What is the result?

A. null

B. Compilation fails

C. An exception is thrown at runtime

D. 0

QUESTION NO: 120

Given:

```
public class Msg {
    public static String doMsg(char x) {
        return "Good Day!";
    }
    public static String doMsg(int y) {
        return "Good Luck!";
    }
    public static void main(String[] args) {
        char x = 8;
        int z = '8';
        System.out.println(doMsg(x));
        System.out.print(doMsg(z));
    }
}
```


What is the result?

A.
Good Day!

Good Luck!

B.
Good Day!

Good Day!

C.
Good Luck!

Good Day!

D.
Good Luck!

Good Luck!

E.
Compilation fails

QUESTION NO: 121

Which two items can legally be contained within a java class declaration?

A. An import statement

B. A field declaration

C. A package declaration

D. A method declaration

QUESTION NO: 123

Given:

```
public class Case {
    public static void main(String[] args) {
        String product = "Pen";
        product.toLowerCase();
        product.concat(" BOX".toLowerCase());
        System.out.print(product.substring(4,6));
    }
}
```


What is the result?

A. box

B. nbo

C. bo

D. nb

E. An exception is thrown at runtime

QUESTION NO: 127

Given the code fragment:

```
public static void main(String[] args) {
    ArrayList<String> list = new ArrayList<>();

    list.add("SE");
    list.add("EE");
    list.add("ME");
    list.add("SE");
    list.add("EE");

    list.remove("SE");

    System.out.print("Values are : " + list);
}
```


What is the result?

A. Values are : [EE, ME]

B. Values are : [EE, EE, ME]

C. Values are : [EE, ME, EE]

D. Values are : [SE, EE, ME, EE]

E. Values are : [EE, ME, SE, EE]

QUESTION NO: 129

Which two actions will improve the encapsulation of a class?

A. Changing the access modifier of a field from public to private

B. Removing the public modifier from a class declaration

C. Changing the return type of a method to void

D. Returning a copy of the contents of an array or ArrayList instead of a direct reference

QUESTION NO: 136

Given the code fragment:

```
public class Test {
    public static List data = new ArrayList();

    // insert code here
    {
        for (String x : strs) {
            data.add(x);
        }
        return data;
    }

    public static void main(String[] args) {
        String[] d = {"a", "b", "c");
        update(d);
        for (String s : d) {
            System.out.print(s + " ");
        }
    }
}
```


Which code fragment, when inserted at // insert code here, enables the code to compile and print a b c?

A. List update (String[] strs)

B. static ArrayListupdate(String [] strs)

C. static List update (String [] strs)

D. static void update (String[] strs)

E. ArrayList static update(String [] strs)

QUESTION NO: 137

Given the code fragment:

```
System.out.println( 28 + 5 <= 4 + 29 );
System.out.println( ( 28 + 5 ) <= ( 4 + 29 ) );
```

What is the result?

A.
28false29

true

B.
285 < 429

true

C.
true

true

D.
compilation fails

QUESTION NO: 138

Given:

```
public class Access {
     private int x = 0;
     private int y = 0;

     public static void main(String[] args) {
          Access accApp = new Access();
          accApp.printThis(1, 2);
          accApp.printThat(3, 4);
     }

     public void printThis(int x, int y) {
          x = x;
          y = y;
          System.out.println("x:" + this.x + " y:" + this.y);
     }

     public void printThat(int x, int y) {
          this.x = x;
          this.y = y;
          System.out.println("x:" + this.x + " y:" + this.y);
     }
}
```


What is the result?

A. x: 1 y: 2

B. 3 y: 4

C. x: 0 y: 0

D. 3 y: 4

E. x: 1 y: 2

F. 0 y: 0

G. x: 0 y: 0

H. 0 y: 0

QUESTION NO: 139

Given the code fragment:

```
class Student {
     String name;
     int age;
}
```

And,

```
1.   public class Test {
2.        public static void main(String[] args) {
3.           Student s1 = new Student();
4.           Student s2 = new Student();
5.           Student s3 = new Student();
6.           s1 = s3;
7.           s3 = s2;
8.           s2 = null;
9.        }
10.  }
```

Which statement is true?

A. After line 8, three objectsare eligible for garbage collection

B. After line 8, two objects are eligible for garbage collection

C. After line 8, one object is eligible for garbage collection

D. After line 8, none of the objects are eligible for garbage collection

QUESTION NO: 141

Given the code fragment:

```
9.   int a = -10;
10.  int b = 17;
11.  int c = expression1;
12.  int d = expression2;
13.  c++;
14.  d--;
15.  System.out.print(c+ ", " + d);
```

What could **expression1** and **expression2** be, respectively, in order to produce output –8, 16?

A. ++a, - -b

B. + +a, b- -

C. a+ +, - - b

D. a + +, b - -

QUESTION NO: 142

Given:

```
public class Test2 {
    public static void doChange(int[] arr) {
        for(int pos = 0; pos < arr.length; pos++) {
            arr[pos] = arr[pos] + 1;
        }
    }
    piblic static void main(String[] args) {
        int[] arr = (10, 20, 30);
        doChange(arr);
        for(int x: arr) {
            System.out.print(x + ", ");
        }
        doChange(arr[0], arr[1], arr[2]);
        System.out.print(arr[0] + ", " + arr[1] + ", " + arr[2]);
    }
}
```


What is the result?

A. 11, 21, 31, 11, 21, 31

B. 11, 21, 31, 12, 22, 32

C. 12, 22, 32, 12, 22, 32

D. 10, 20, 30, 10, 20, 30

QUESTION NO: 143

Given:

```
public class Palindrome {
    public static int main(String[] args) {
        System.out.print(args[1]);
        return 0;
    }
}
```



```
And the commands:
javac Palindrome.java
java Palindrome Wow Mom
```

What is the result?

A. Compilation fails

B. The code compiles, but does not execute.

C. Palindrome

D. Wow

E. Mom

QUESTION NO: 144

Given:

```
class Jump {
    static String args[] = {"lazy", "lion", "is", "always");
    public static void main(String[] args) {
        System.out.println{
            args[1] + " " + args[2] + " " + args[3] + " jumping");
    }
}
```

And the commands:

javac Jump.java

java Jump crazy elephant is always

What is the result?

A. Lazylion is jumping

B. Lion is always jumping

C. Crazy elephant is jumping

D. Elephant is always jumping

E. Compilation fails

=

QUESTION NO: 145

Which code fragment cause a compilation error?

A. flat flt = 100F;

B. float flt = (float) 1_11.00;

C. float flt = 100;

D. double y1 = 203.22; floatflt = y1;

E. int y2 = 100; floatflt = (float) y2;

QUESTION NO: 146

Given:

```
class Test {
    public static void main(String[] args) {
        int numbers[];
        numbers = new int[2];
        numbers[0] = 10;
        numbers[1] = 20;

        numbers = new int[4];
        numbers[2] = 30;
        numbers[3] = 40;
        for (int x : numbers) {
            System.out.print(" "+x);
        }
    }
}
```


What is the result?

A. 10 20 30 40

B. 0 0 30 40

C. Compilation fails

D. An exception is thrown at runtime

QUESTION NO: 147

Given:

```
public class Series {
    public static void main(String[] args) {
        int arr[] = {1, 2, 3,};

        for (int var : arr) {
           int i = 1;
           while (i <= var);
                System.out.println(i++);
        }
    }
}
```

What is the result?

A.
1
1
1

B.
1
2
3

C.
2
3
4

D.
Compilation fails

E.
The loop executes infinite times

QUESTION NO: 149

Give:

```
class Alpha {
     public String[] main = new String[2];
     Alpha(String[] main) {
          for (int ii = 0; ii < main.length; ii++) {
               this.main[ii] = main[ii] +5;
          }
     }
     public void main() {
     System.out.print(main[0] + main[1]);
     }
}

public class Test {
     public static void main(String[] args) {
          Alpha main = new Alpha(args);
          main.main();
     }
}
```


And the commands:

```
javac Test.java
java Test 1 2
```

What is the result?

A. 1525

B. 13

C. Compilation fails

D. An exception is thrown at runtime

E. The program fails to execute due to runtime error

QUESTION NO: 150

Given:

```
public class Test {
     public static void main(String[] args) {
          Test ts = new Test();
          System.out.print(isAvailable + " ");
          isAvailable = ts.doStuff();
          System.out.println(isAvailable);
     }
     public static boolean doStuff() {
          return !isAvailable;
     }
     static boolean isAvailable = false;
}
```


What is the result?

A. true true

B. true false

C. false true

D. false false

E. Compilation fails

QUESTION NO: 151

Given the code in a file Traveler.java:

```
class Tours {
    public static void main(String[] args) {
        System.out(”Happy Journey! ” + args[1]);
    }
}

public class Traveler {
    public static void main(String[] args) {
        Tours.main(args);
    }
}
```


And the commands:

javac Traveler.java

java Traveler Java Duke

What is the result?

A. Happy Journey! Duke

B. Happy Journey! Java

C. An exception is thrown at runtime

D. The program fails toexecute due to a runtime error

QUESTION NO: 154

Given:

```
public class CharToStr {
    public static void main(String[] args) {
        String str1 = "Java";
        char str2[] = { 'J', 'a', 'v', 'a' };
        String str3 = null;
            for (char c : str2) {
                str3 = str3 + c;
            }
            if (str1.equals(str3))
                System.out.print("Successful");
            else
                System.out.print("Unsuccessful");
    }
}
```


What is result?

A. Successful

B. Unsuccessful

C. Compilation fails

D. An exception is thrown at runtime

QUESTION NO: 155

Given:

```
public class Series {
    private boolean flag;

    public void displaySeries() {
        int num = 2;
        while (flag) {
            if (num % 7 == 0)
                flag = false;
            System.out.print(num);
            num += 2;
        }
    }
    public static void main(String[] args) {
        new Series().displaySeries();
    }
}
```


What is the result?

A. 2 4 6 8 10 12

B. 2 4 6 8 10 12 14

C. Compilation fails

D. The program prints multiple of 2infinite times

E. The program prints nothing

QUESTION NO: 158

Given the code fragment:

```
12. int row = 10;
13. for ( ; row > 0 ; ) {
14.     int col = row;
15.     while (col >= 0) {
16.         System.out.print(col + " ");
17.         col -= 2;
18.     }
19.     row = row / col;
20. }
```

What is the result?

A. 10 8 6 4 2 0

B. 10 8 6 4 2

C. AnArithmeticException is thrown at runtime

D. The program goes into an infinite loop outputting: 10 8 6 4 2 0. . .

E. Compilation fails

QUESTION NO: 160

Given:

```
public class Test1 {
    static void doubling (Integer ref, int pv) {
        ref =20;
        pv = 20;
    }
    public static void main(String[] args) {
        Integer iObj = new Integer(10);
        int iVar = 10;
        doubling(iObj++, iVar++);
        System.out.println(iObj+ ", "+iVar);
```

What is the result?

A. 11, 11

B. 10, 10

C. 21, 11

D. 20, 20

E. 11, 12

QUESTION NO: 172

Given the code fragment:

```
public static void main(String[] args) {
        int iArray[] = {65, 68, 69};
        iArray[2] = iArray[0];
        iArray[0] = iArray[1];
        iArray[1] = iArray[2];
        for (int element : iArray) {
            System.out.print(element + " ");
          }
}
```

A. 68, 65, 69

B. 68, 65, 65

C. 65, 68, 65

D. 65, 68, 69

E. Compilation fails

QUESTION NO: 174

Given:

```
public class MyClass {
    public static void main(String[] args) {
        while (int ii = 0; ii < 2) {
        ii++;
        System.out.println("ii = " + ii);
    }
 }
}
```


What is the result?

A.
ii = 1

ii = 2

B. Compilation fails

C. The program prints nothing

D. The program goes into an infinite loop with no output

E.
The program goes to an infinite loop outputting:

ii = 1

ii = 1

QUESTION NO: 175

Given:

```
public class String1 {
    public static void main(String[] args) {
        String s = "123";
        if (s.length() >2)
            s.concat("456");
        for(int x = 0; x <3; x++)
            s += "x";
        System.out.println(s);
    }
}
```

What is the result?

A. 123

B. 123xxx

C. 123456

D. 123456xxx

E. Compilation fails

QUESTION NO: 176

Given the code fragment:

```
float x = 22.00f % 3.00f;
      int y = 22 % 3;
      System.out.print(x + ", "+ y);
```

What is the result?

A. 1.0, 1

B. 1.0f, 1

C. 7.33, 7

D. Compilation fails

E. An exception is thrown at runtime

QUESTION NO: 183

Given:

```
public class FieldInit {
    char c;
    boolean b;
    float f;
    void printAll() {
        System.out.println("c = " + c);
        System.out.println("c = " + b);
        System.out.println("c = " + f);
    }

    public static void main(String[] args) {
     FieldInit f = new FieldInit();
     f.printAll();
    }
}
```


What is the result?

A.
c = null

b = false

f = 0.0F

B.
c = 0

b = false

f = 0.0f

C.
c = null

b = true

f = 0.0

D.
c =

b = false

f =0.0

QUESTION NO: 184

Given the code fragment:

```
String[] cartoons = {"tom","jerry","micky","tom"};
int counter =0;

if ("tom".equals(cartoons[0])) {
    counter++;
} else if ("tom".equals(cartoons[1])) {
    counter++;
} else if ("tom".equals(cartoons[2])) {
    counter++;
} else if ("tom".equals(cartoons[3])) {
    counter++;
}
System.out.print(counter);
```


What is the result?

A. 1

B. 2

C. 4

D. 0

QUESTION NO: 187

Given the code fragment

```
int var1 = -5;
int var2 = var1--;
int var3 = 0;
if (var2 < 0) {
    var3 = var2++;
} else {
    var3 = --var2;
}
System.out.println(var3);
```


What is the result?

A.
– 6

B.
– 4

C.
– 5

D.
5

E.
4

F.
Compilation fails

QUESTION NO: 192

Given the code fragment:

```
List colors = new ArrayList();
colors.add("green");
colors.add("red");
colors.add("blue");
colors.add("yellow");
colors.remove(2);
colors.add(3,"cyan");
System.out.print(colors);
```

What is the result?

A. [green, red, yellow, cyan]

B. [green, blue, yellow, cyan]

C. [green, red, cyan, yellow]

D. Am IndexOutOfBoundsException is thrown at runtime

QUESTION NO: 188

Given:

```
public class TestOperator {
    public static void main(String[] args) {
    int result = 30 -12 / (2*5)+1;
    System.out.print("Result = " + result);

    }
}
```

What is the result?

A.
Result = 2

B.
Result = 3

C.
Result = 28

D.
Result= 29

E.
Result = 30

QUESTION NO: 193

Given:

```
public class TestField {
    int x;
    int y;
    public void doStuff(int x, int y) {
        this.x = x;
        y =this.y;
    }
    public void display() {
        System.out.print(x + " " + y + " : ");
    }
    public static void main(String[] args) {
        TestField m1 = new TestField();
        m1.x = 100;
        m1.y = 200;
        TestField m2 = new TestField();
        m2.doStuff(m1.x, m1.y);
        m1.display();
        m2.display();
    }
}
```


What is the result?

A.
100 200 : 100 200

B.
100 0 : 100 0 :

C.
100 200 : 100 0 :

D.
100 0 : 100 200 :

QUESTION NO: 194

Given:

```
package p1;
public class Test {
   static double dvalue;
   static Test ref;
    public static void main(String[] args) {
        System.out.println(ref);
        System.out.println(dvalue);
     }
}
```


What is the result?

A.
p1.Test.class

0.0

B.
<the summary addressreferencedby ref>

0.000000

C.
Null

0.0

D.
Compilation fails

E.
A NullPointerException is thrown at runtime

QUESTION NO: 195

Given:

```
public class Natural {
    private int i;
    void disp() {
        while (i <= 5) {
            for (int i=1; i <=5;) {
                System.out.print(i + " ");
                i++;
            }
            i++;
        }
    }
    public static void main(String[] args) {
        new Natural().disp();
        }
}
```


What is the result?

A. Prints 1 2 3 4 5once

B. Prints 1 3 5 once

C. Prints 1 2 3 4 5 five times

D. Prints 1 2 3 4 5 six times

E. Compilation fails

QUESTION NO: 196

Given:

```
public class Test {
    static boolean bVar;
    public static void main(String[] args) {
        boolean bVar1 = true;
        int count =8;
        do {
            System.out.println("Hello Java! " +count);
            if (count >= 7) {
                bVar1 = false;
            }
        } while (bVar != bVar1 && count > 4);
        count -= 2;
        }
}
```

What is the result?

A.
Hello Java! 8

Hello Java!6

Hello Java! 4

B.
Hello Java! 8

Hello Java! 6

C.
Hello Java! 8

D.
Compilation fails

QUESTION NO: 197

Given the code fragment:

```
System.out.println(2 + 4 * 9 - 3);     //Line 21
   System.out.println((2 + 4) * 9 - 3);    // Line 22
   System.out.println(2 + (4 * 9) - 3);    // Line 23
   System.out.println(2 + 4 * (9 - 3));    // Line 24
   System.out.println((2 + 4 * 9) - 3);    // Line 25
```

Which line of codes prints the highest number?

A. Line 21

B. Line 22

C. Line 23

D. Line 24

E. Line 25

QUESTION NO: 201

Given the code fragment:

```
for (int ii = 0; ii < 3;ii++) {
            int count = 0;
            for (int jj = 3; jj > 0; jj--) {
                if (ii == jj) {
                    ++count;
                    break;
                }
            }
            System.out.print(count);
            continue;
        }
```

What is the result?

A. 011

B. 012

C. 123

D. 000

QUESTION NO: 206

Given:

```
public class ColorTest  {
    public static void main(String[] args) {
        String[] colors = {"red", "blue","green","yellow","maroon","cyan"};
        int count = 0;
        for (String c : colors) {
            if (count >= 4) {
                break;
        }
        else {
        continue;
        }
        if (c.length() >= 4) {
            colors[count] = c.substring(0,3);
        }
        count++;
        }
        System.out.println(colors[count]);
    }
}
```


What is the result?

A. Yellow

B. Maroon

C. Compilation fails

D. A StringIndexOutOfBoundsException is thrown at runtime.

QUESTION NO: 207

Given:

```
public class App  {
   // Insert code here
        System.out.print("Welcome to the world of Java");
    }
}
```


Which two code fragments, when inserted independently at line // Insert code here, enable the program to execute and print the welcome message on the screen?

A. static public void main (String [] args) {

B. static void main (String [] args) {

C. public static void Main (String [] args) {

D. public static void main (String [] args) {

E. public void main (String [] args) {

QUESTION NO: 209

Given:

```
public class TestLoop  {
     public static  void main(String[] args) {
         int array[] =  {0, 1, 2, 3, 4};
         int key = 3;
         for (int pos = 0; pos < array.length; ++pos) {
             if (array[pos] == key) {
                 break;
             }
         }
         System.out.print("Found " + key + "at " + pos);

     }
}
```

What is the result?

A. Found 3 at 2

B. Found 3 at 3

C. Compilation fails

D. An exception is thrown at runtime

QUESTION NO: 210

Given:

```
public class MyClass  {
     public static  void main(String[] args) {
         String s = " Java Duke ";
         int len = s.trim().length();
         System.out.print(len);
     }
}
```

What is the result?

A. 8

B. 9

C. 11

D. 10

E. Compilation fails