

# **MOCK EXAM 2**

# Mock Exam—2

## QUESTION 1

Q 1: Sam works as a Programmer in Tech blue Inc. He writes the following program:

```
public class Test {
    String s;
    int val;
    public Test() {
        s += "wel come";
    }
    public Test(int val) {
        this.val = val;
        s = "Hi " ;
    }
    public static void main(String args[]) {
        Test c = new Test(28);
        System.out.println(c.s);
    }
}
```

What will happen when he tries to compile and execute the preceding program?

- ☒ A. The program will display:  
Hi
- ☐ B. The program will display:  
Hi welcome 28
- ☐ C. The program will give compilation error.
- ☐ D. The program will throw a runtime exception.

## QUESTION 2

Q 2: Sandy works as a Programmer for Green Net inc. She writes the following program:

```
public class Test{                               //1
protected int myMethod(int a){                  //2
return 0;                                         //3
}}                                                //4
class test2 extends Test{                       //5
//insert code here                             //6
}                                                //7
```

Which of the following methods can be inserted independently at line marked as 6, so that the preceding program will compile successfully? (Choose two or more)

- ☒ A. protected int myMethod(long a){return 0;}      ☐ B. private int myMethod(int a){return 0;}
- ☒ C. private int myMethod(long a){return 0;}      ☐ D. protected long myMethod(int a){return 0;}

## QUESTION 3

Q 3: Tom works as a Programmer for Blue Net Inc. He writes the following program:

```
class A{//1
    protected static String show(String s) { return s; } //2
}
class B extends A {
    public static String multiply(String s) {
        String c=super.show(s); //3
        return c;
    }
}
public class Test {
    public static void main(String arg[]) {
        B bobj = new B();
        System.out.println(bobj.show("kandy")); //4
    }
}
```

What will happen when he tries to compile and execute the preceding program?

- ☒ A. The program will give compilation error at line marked as 3, as non static variable cannot be referenced by static context.

- B. The program will compile and execute successfully and display the output as:  
Kandy.
- C. The program will compile successfully, but will throw a runtime exception.
- D. The program will generate a compilation error at line marked as 3, as the show() method does not belong to the test class.

#### QUESTION 4

Q 4: Nancy works as a Programmer for BlueTech Inc. She writes the following program:

```
import java.util.*;
import java.io.*;
public class Test {
    public static void main(String str[]) {
        try {
            FileWriter fw = new FileWriter("Test1.txt");
            fw.write("red, blue, green, white, yellow, black");
            fw.close();
            FileReader fr = new FileReader("Test1.txt");
            Scanner scan = new Scanner(fr);
            while (scan.hasNext()) {
                System.out.print(scan.next() + " ");
            }
        } catch (IOException e) {
            System.out.println("I/O exception is raised");
        }
    }
}
```

What will happen when she tries to compile and execute the preceding program?

- ☒ A. It will produce the output as:  
red,blue,green,white,yellow,black
- ☐ B. It will produce the output as:  
red
- ☐ C. It will generate a compilation error.
- ☐ D. It will throw a runtime exception.

#### QUESTION 5

Q 5: Ahmed works as a Programmer for ABC Company. He writes the following codes:

```
public interface MyInterface //1
{ //2
    /* insert code here */ float f1 = 2; //3
} //4
```

Which of the following options are valid to be inserted at line number 3?

- ☒ A. final
- ☐ B. abstract
- ☒ C. public
- ☒ D. static

#### QUESTION 6

Q 6: Dheeraj works as a Programmer in Kogent Solutions Inc. He writes the following program:

```
class MyQuestion {
    public static void main(String args[]) {
        int a = 10;
        boolean bool1 = false;
        boolean bool2 = true;
        if ((a == 7) && !bool1)
            System.out.print("Welcome ");
        System.out.print("to ");
        if ((bool1 = true) && bool2)
            System.out.print("Java ");
    }
}
```

What will happen when he tries to compile and execute the preceding program?

- A. The program will display: Welcome
- ☒ B. The program will display: to Java
- C. The program will display: Welcome to
- D. The program will generate compilation error

### QUESTION 7

**Q 7:** Rohit works as a Programmer in EasySoft Inc. He writes the following program:

```
Rohit works as a Programmer in EasySoft Inc. He writes the following program:
interface MyInterface {
}
class A implements MyInterface {
}
class B extends A{
}
class MyQuestion extends B{
    public static void main(String args[]) {
        B obj = new B();
        //code will be inserted here           // 1
    }
}
```

Which of the following statements will throw the `java.lang.ClassCastException` exception, when you insert the statement at the line marked as 1?

- A. `A obj2 = obj;`
- B. `B obj2 = (B)(A)obj;`
- ☒ C. `MyInterface x=(MyQuestion)obj;`
- D. `MyInterface x=(A)obj;`

### QUESTION 8

**Q 8:** Mr. Kishore works as a Programmer for EasySoft Inc. He writes the following program:

```
class Test {
    public static void main(String args[]) {
        int a = 9;
        Test t = new Test();
        t.doMethod(a);
        System.out.print(" main() a = " + a);
    }
    void doMethod(int a) {
        System.out.print(" doMethod() a = " + a++);
    }
}
```

What will be output of the preceding program?

- ☒ A. The program will display:  
`doMethod() a = 9 main() a = 9`
- B. The program will display:  
`doMethod() a = 10 main() a = 10`
- C. The program will display:  
`doMethod() a = 9 main() a = 10`
- D. The program will display:  
`doMethod() a = 10 main() a = 9`

### QUESTION 9

**Q 9:** Neeraj works as a Programmer in Kogent Solutions Inc. He writes the following program:

```
class Temp {
    public enum Meal {BREAKFAST, LUNCH, DINNER}
}
public class Test {
    public static void main(String []ar) {
        //1
    }
}
```

Which of the following statements can be inserted at the line marked as 1 so that the preceding program compiles and executes successfully?

- A. `Meal m = DINNER;`
- ☒ B. `Temp.Meal m = Temp.Meal.DINNER;`
- C. `Temp.Meal m = DINNER;`
- D. `Meal m = Meal.DINNER;`

### QUESTION 10

Q 10: Vikash works as a Programmer in Kogent Solutions Inc. He writes the following program:

```
public interface X {
    int a = 10;
    public void doMethod();
}
```

Which of the following options is correct to create an interface called Y that has the interface X as its parent?

- ☒ A. `public interface Y implements X {}`
- ☐ B. `public interface Y instanceof X {}`
- ☐ C. `public interface Y inheritsFrom X {}`
- ☐ D. `public interface Y extends X {}`

### QUESTION 11

Q 11: Sam works as a Programmer for HighTech Inc. He writes the following program:

```
class X {
    public void doMethod() {
        System.out.println("doMethod() of X class");
    }
}
class Y extends X {
    public void doMethod() {
        System.out.println("doMethod() of Y class");
    }
    public static void main(String args[]) {
        ((X) new Y()).doMethod();
    }
}
```

What will happen when he compiles and executes the preceding program?

- ☒ A. The program will display the output as:  
doMethod() of Y class
- ☐ B. The program will display the output as:  
doMethod() of X class
- ☐ C. The program will generate a compilation error.
- ☐ D. The program will throw a runtime exception.

### QUESTION 12

Q 12: Imagine you work as a Programmer in NewTech Inc. You write the following program:

```
interface MyInterface {
    String toString();
}
class Test {
    public static void main(String args[]) {
        System.out.println(new Test() {
            public String toString() {
                return "Test";
            }
        });
    }
}
```

What will happen when you compile and execute the preceding program?

- ☐ A. The program will compile and execute successfully, but will not display any output.
- ☒ B. The program will display the output as: Test
- ☐ C. The program will generate a compilation error.
- ☐ D. The program will throw a runtime exception.

### QUESTION 13

Q 13: Mrinal works as a Programmer in HighNet Inc. He writes the following program:

```
abstract class SuperClass {
    protected abstract int getNumber();
}
```

```
class SubClass extends SuperClass {
    //code will be inserted here
    public static void main(String []ar)
    { }
}
```

//1

Which of the following options can be inserted at the line marked as 1 so that the SubClass class is compiled and executed successfully?

☒ A. protected int getNumber() { return 100; }

C. int getNumber() { return 100; }

☒ B. public int getNumber() { return 100; }

D. private int getNumber() { return 100; }

#### QUESTION 14

Q 14: Mahtab works as a Programmer in Kogent Solutions Inc. He writes the following program:

```
public abstract class Shape {
    public abstract void draw();
}
```

Which of the following classes have used the Shape class correctly?

A. public abstract class Triangle implements Shape

```
{
    public void draw() { }
}
```

B. public class Triangle extends Shape

```
{
    public void draw();
}
```

☒ C. public abstract class Triangle extends Shape

```
{
    private int side;
}
```

☒ D. public class Triangle extends Shape

```
{
    public void draw() { }
}
```

#### QUESTION 15

Q 15: Anirban works as a Programmer in Kogent Solutions Inc. He writes the following interfaces:

```
interface Interface1 {
    void M1();
}
interface Interface2 {
    void M2();
}
```

Which of the following classes correctly implement both the interfaces (Interface1 and Interface2)?

☒ A. public class Test implements Interface1, Interface2

```
{
    public void M1() { }
    public void M2() { }
}
```

B. public class Test extends Interface1, Interface2

```
{
    public void M1() { }
    public void M2() { }
}
```

C. public class Test implements Interface1, Interface2

```
{
    public void M1();
    public void M2();
}
```

☒ D. public abstract class Test implements Interface1, Interface2

```
{
    public void M1() { }
    public void M2() { }
}
```

### QUESTION 16

Q 16: Neha works as a Java Developer for XYZ Software Solution. She writes the following program:

```
class Test1 {
    public static void main(String[] args) {
        Test1 objTest1 = new Test1();
        objTest1.doMethod("test");
    }
    public void doMethod(String str) {
        try {
            int i = Integer.parseInt(str);
        } catch (NumberFormatException nfe) {
            i = 0;
        } finally {
            System.out.println(i);
        }
    }
}
```

What will happen when she tries to compile and execute the preceding program?

- A. The program will display the output as: 0
- B. The program will throw the ParseException exception at runtime.
- C. The program will throw the NumberFormatException exception at runtime.
- ☒ D. The program will generate the compilation error.

### QUESTION 17

Q 17: Maria works as a Java Developer for XYZ Software Solution. She writes the following program:

```
class Test {
    int a = 100;
    public void doMethod(int a) {
        a += a;
        System.out.println(a);
    }
    public static void main(String args[]) {
        Test obj1 = new Test();
        obj1.doMethod(20);
    }
}
```

What will be the output when the preceding program is compiled and executed successfully?

- A. The program will display the output as: 20
- B. The program will display the output as: 100
- ☒ C. The program will display the output as: 40
- D. The program will display the output as: 120

### QUESTION 18

Q 18: Ramya works as a Programmer in Kogent Solutions Inc. She writes the following program:

```
class Test {
    public static void main(String args[])
    {
        int []a= {10, 20, 30, 40, 50};
        int b[]=a;
        System.out.println(b[3]);
    }
}
```

What will happen when she tries to compile and execute the preceding program?

- A. The program will display the output as: 30  
 B. The program will display the output as: 40  
 C. The program will generate the compilation error.  
 D. The program will throw a runtime exception.

### QUESTION 19

Q 19: Dheeraj works as a Programmer in Kogent Solutions Inc. He writes the following program:

```
class Test {
    int #x = 100; //1
    float _f = 125.55f; //2
    double ~test = 56.22; //3
    int $i = 15; //4
}
```

What will happen when he tries to compile and execute the preceding program?

- A. The program will generate a compilation error at the line marked as 1.  
 B. The program will generate a compilation error at the line marked as 2.  
 C. The program will generate a compilation error at the line marked as 3.  
 D. The program will generate a compilation error at the line marked as 4.

### QUESTION 20

Q 20: Ashish works as a Programmer in Kogent Solutions Inc. He writes the following program:

```
public class Test {
    public static void main(String args[]) {
        Object obj = new int[] { 10, 20, 30 }; //1
        int[] array = (int[])obj; //2
        for (int i: array) //3
            System.out.print(i + " ");
    }
}
```

What will happen when you compile and run the preceding program?

- A. The program will display the output as:  
 10 20 30  
 B. The program will generate a compilation error at the line marked as 1.  
 C. The program will generate a compilation error at the line marked as 2.  
 D. The program will generate a compilation error at the line marked as 3.

### QUESTION 21

Q 21: Ajay works as a Programmer in ABC Company Ltd. He writes the following program:

```
class X {
    private int count = 0;
    public static int getInstanceCount() {
        return count;
    }
}
```



```

    }
    public X() {
        count++;
    }
}
class Test extends X {
    public static void main(String []ar) {
        X obj1 = new X();
        X obj2 = new X();
        System.out.println(X.getInstanceCount());
    }
}

```

What will happen when he compiles and runs the preceding program?

- A. The program will display the output as: 0      B. The program will display the output as: 2  
☒ C. The program will generate the compilation error.      D. The program will throw a runtime exception.

### QUESTION 22

Q 22: Which Student class properly represents the relationship “Student has a best friend who is a Teacher”?

- A. class Student extends Teacher  
 B. class Student implements Teacher  
☒ C. class Student

```

{
    private Teacher bestFriend;
}

```

D. class Student

```

{
    private BestFriend Teacher;
}

```

### QUESTION 23

Q 23: Neeraj works as a Programmer in Kogent Solutions Inc. He writes the following program:

```

class Test {
    public void doMethod() { //1
    }

    public String doMethod() { //2
        return "a";
    }
    public double doIt(int x) { //3
        return 1.0;
    }
}

```

What will happen when he tries to compile and execute the preceding program?

- A. The program will generate a compilation error at the line marked as 1.  
☒ B. The program will generate a compilation error at the line marked as 2.  
 C. The program will generate a compilation error at the line marked as 3.  
 D. The program will throw a runtime exception.

### QUESTION 24

Q 24: Sam works as a Programmer for CompNet Inc. He writes the following program:

```

import java.text.*;
public class Test {
    public static void main(String args[]) {
        NumberFormat obj = NumberFormat.getInstance();
        obj.setMaximumFractionDigits(3);
        obj.setMinimumFractionDigits(2);
    }
}

```

```
String a = obj.format(4.12762443);
String b = obj.format(3);
System.out.println(a+" "+b);
}
}
```

What will happen when he tries to compile and execute the preceding program?

- A. It will produce the output as:  
4.12 3.0
- ☒ B. It will produce the output as:  
4.128 3.00
- C. It will give compilation error.
- D. It will throw a runtime exception.

### QUESTION 25

Q 25: Nicole works as a Programmer for HighNet Inc. She writes the following program:

```
import java.util.*;
import java.text.*;
public class Test {
    public static void main(String args[]) {
        double val=522013.50;
        Locale loc=new Locale("it");
        NumberFormat obj=NumberFormat.getInstance(loc);
        String b;
        b = obj.format( val);
        System.out.print(b);
    }
}
```

What will happen when she tries to compile and execute the preceding program?

- ☒ A. It will produce the output as:  
522.013,5
- B. It will produce the output as:  
5,22,013.5
- C. It will give compilation error.
- D. It will throw a runtime exception.

### QUESTION 26

Q 26: Kim works as a Programmer for EasySoft Inc. She writes the following program:

```
import java.util.*;
import java.text.*;
public class Test {
    public static void main(String args[]) {
        Date d=new Date();
        DateFormat obj= DateFormat.getDateInstance(DateFormat.SHORT);
        String str = obj.format(d);
        System.out.print(str);
    }
}
```

What will happen when she tries to compile and execute the preceding program? (Assume that the current date is 9<sup>th</sup> September 2008)

- A. It will produce the output as:  
9/5/08 4.15 PM
- ☒ B. It will produce the output as:  
9/10/08
- C. It will give compilation error.
- D. It will throw a runtime exception.

### QUESTION 27

Q 27: John works as a Programmer for DLTech Inc. He writes the following program:

```
public class Test {
    public static void main(String arg[]) {
        String str1 = "x2y4x5y";
        String str2[]=str1.split("\\d");
        for(int i=0;i<str2.length;i++)
            System.out.print(str2[i]+" ");
    }
}
```

What will happen when he tries to compile and execute the preceding program?

- ☒ A. It will produce the output as:  
x y x y
- B. It will produce the output as:  
2 4 5
- C. It will give compilation error.
- D. It will throw a runtime exception.



#### QUESTION 28

Q 28: Mike works as a Software Developer for ABC Inc. He writes the following program.

```
public class Test {  
    public static void main(String arg[]) {  
        String str1 = "Kogent 1. Kogent 2. Kogent 3.";   
        String str2[]=str1.split("\\.\\s*");  
        for(int i=0;i<str2.length;i++)  
            System.out.print(str2[i]+" ");  
    }  
}
```

What will happen when he tries to compile and execute the preceding program?

- A. It will produce the output as:  
Kogent 1. Kogent 2. Kogent 3.
- ☒ B. It will produce the output as:  
Kogent 1 Kogent 2 Kogent 3
- C. It will generate a compilation error.
- D. It will throw a runtime exception.



#### QUESTION 29

Q 29: Nishi works as a Programmer for XYZ Inc. She writes the following program:

```
import java.util.regex.*;  
import java.util.*;  
class Test {  
    public static void main(String s[]) {  
        String str="shalini, 22, student";  
        Scanner sc = new Scanner(str);  
        sc.useDelimiter(",");  
        System.out.print(sc.next()+" ");  
    }  
}
```

What will happen when she tries to compile and execute the preceding program?

- ☒ A. It will produce the output as:  
shalini
- B. It will produce the output as:  
shalini 22 student
- C. It will generate a compilation error.
- D. It will throw a runtime exception.



#### QUESTION 30

Q 30: Joseph works as an Application Developer for TechIt Inc. He writes the following program:

```
public class Test implements Runnable {  
    public void run() {  
        System.out.print("test");  
    }  
    public static void main(String[] args) {  
        Thread t = new Thread(new Test());  
        t.start();  
        t.run();  
    }  
}
```

What will happen when he tries to compile and execute the preceding program?

- A. It will produce the output as:  
test as
- ☒ B. It will produce the output as:  
testtest
- C. It will give compilation error.
- D. It will throw a runtime exception.

### QUESTION 31

Q 31: Anthony works as Software Developer for BGTechnologies Inc. He writes the following program.

```
public class Test implements Runnable {
    public static void main (String[] args) throws Exception {
        Thread t = new Thread(new Test());
        t.start();
        System.out.print("Thread Started");
        t.join();
        System.out.print("Completed");
    }
    public void run() {
        for (int i = 0; i < 5; i++) {
            System.out.print(i);
        }
    }
}
```

What will happen when he attempts to compile and execute the program?

- A. It will produce the output as:  
Thread StartedCompleted
- B. ☒ It will produce the output as:  
Thread Started01234Completed
- C. It will give compilation error.
- D. It will throw a runtime exception.

### QUESTION 32

Q 32: Consider a scenario where Test1 and Test2 are references variables. Test1 refers to a Thread and Test2 refers to an object. Test1 is currently executing the Test2.wait() method. Which of the following methods need to be invoked by another thread to ensure that Test1 stops execution of the wait() method?

- A. Test2.notify()    B. Test1.notify()    C. Thread.notify()    D. ☒ Test2.notifyAll()

### QUESTION 33

Q 33: Mr. Chopra works as a Programmer for Kogent Solutions Inc. He writes the following program:

```
import java.util.*;
public class Test {
    public static void main(String str[]) {
        String s="test1, test2, test3";
        Scanner scan=new Scanner(s).useDelimiter("test");
        System.out.print(scan.next());
        System.out.print(scan.next());
        System.out.print(scan.next());
        scan.close();
    }
}
```

What will happen when he tries to compile and execute the above program?

- A. ☒ It will produce the output as:  
1,2,3
- B. It will produce the output as:  
test,test,test
- C. It will generate a compilation error.
- D. It will throw a runtime exception.

### QUESTION 34

Q 34: Which of the following statements are true about the hashCode() method?

- A. ☒ Each object class in the Java language provides an implementation of the hashCode() method.
- B. ☒ The hashCode() method is part of java.lang.Object class.
- C. The hashCode() method can be used to test for object equality and inequality.
- D. ☒ The default hashCode() method uses the 32-bit internal JVM address of the object as its hashCode.

### QUESTION 35

Q 35: Consider the following code snippet:

```
enum Well { hey, hi, hello };
```

Which of the following statement is true about the preceding code snippet?

- A. The Well values can be used in java.util.SortedSet, but the set will be unsorted.
- ☒ B. The expressions hey.equals(hey) and (hey==hey) are true.
- C. The well values cannot be used in java.util.HashMap.
- D. The expression (hey<hii) is true.

### QUESTION 36

Q 36: Which of the following is true about the finalize() method?

- A. Every class inherits the finalize() method from java.lang.Thread.
- ☒ B. The finalize() method is called by the garbage collector when it determines that no more references to the object exist.
- ☒ C. Every class inherits the finalize() method from java.lang.Object.
- ☒ D. The finalize() method should be overridden to clean-up non- resources like closing a file.

### QUESTION 37

Q 37: Ria works as a Programmer for TimeNet Inc. She writes the following program:

```
public class Test {
    static public void main(String rat[]) {
        for(int z=2 ; z<rat.length; z++) {
            System.out.print(rat[z] + " ");
        }
    }
}
```

What will happen if she tries to execute the preceding program by writing the following command line argument?

```
j ava Test 456
```

- A. It will display the output as:  
456
- B. It will display the output as:  
6
- C. It will throw a runtime exception.
- ☒ D. It will compile and execute but does not display anything as output.

### QUESTION 38

Q 38: Sarah works as a Programmer for Globus Inc. She writes the following program:

```
public class Ten {
    static public void main(String rock[]) {
        for(int q=rock.length; q>0; q--) {
            System.out.print(rock[q] + " ");
        }
    }
}
```

What will be the output if she tries to execute the preceding program by writing the following command line argument?

```
j ava Ten 123
```

- ☒ A. It will throw a runtime exception-ArrayIndexOutOfBoundsException.
- B. It will display the output as:  
3 2 1
- C. It will display the output as:  
3 2
- D. It will compile and execute successfully, but does not display anything as an output.

### QUESTION 39

Q 39: Hardy works as a Programmer for Blue Net Inc. He writes the following program:

```
public class Test {
    private String col;
    public String getcolor() { return col; }
    public void setcolor(String d)
    { col = d; }
    public static void changecol (Test Col11,String col) {
        Col11 = new Test();
        Col11.setcolor(col);
    }
    public static void main(String[] args) {
        Test i = new Test();
        i.setcolor("Red");
        Test i2 = new Test();
        i2.setcolor("green");
        changecol (i2,"white");
        i.setcolor("pink");
        changecol (i2,"Orange");
        System.out.println(i.getcolor());
        System.out.println(i2.getcolor());
    }
}
```

What will be the output when he tries to compile and execute the preceding program?

- |   |   |
|---|---|
| A. It will display the output as:<br>Red<br>Orange  | <input checked="" type="radio"/> B. It will display the output as:<br>pink<br>green |
| C. It will display the output as:<br>white<br>green | D. It will display the output as:<br>Red<br>Orange                                  |

### QUESTION 40

Q 40: Hardy works as a Programmer for Shine Inc. He writes the following program:

```
public class Car12 {
    private static final int gear;
    public Car12(int gear) {
        this.gear = gear;
    }
    public static void main(String[] args) {
        Car12 f1 = new Car12(2);
        System.out.println(f1.gear);
        Car12 f2 = new Car12(4);
        System.out.println(f2.gear);
    }
}
```

What will happen when he tries to compile and execute the preceding program?

- A. It will produce the output as:  
2  
4
- B. It will produce the output as:  
4
- ☒ C. It will generate a compilation error, as gear is a final variable that cannot be reassigned.
- D. It will throw a runtime exception.

### QUESTION 41

Q 41: Nancy works as a Programmer for White Inc. She writes the following program:

```
class A {
    private int val;
    public void setVal( int val) { this.val = val; }
    public int getVal() { return val; }
```

```

    }
    class B {
        private A price;
        public void setPrice( A price) { this.price= price; }
        public A getPrice() { return price; }
    }
    public class Test {
        public static void main( String[] args) {
            B o = new B();
            A i = new A();
            int n=1;
            i.setVal (n);
            o.setPrice(i);
            o.getPrice().setVal ( 104);
            i = new A();
            i.setVal (105);
            o.setPri ce(i);
            System.out.println( o.getPrice().getVal ());
        }
    }

```

What will happen when she tries to compile and execute the preceding program?

- A. It will produce the output as:  
104
- B. ☒ It will produce the output as:  
105
- C. It will give compilation error.
- D. It will throw a runtime exception.

### QUESTION 42

Q 42: Tom works as a Programmer for Red Inc. He writes the following program:

```

import java.util.*;
class A {
    public void Check() {
        ArrayList list = new ArrayList();
        for (int i=5; i>2; i--)
        {
            int value = i * ((int) Math.random());
            Integer Obj = new Integer(value);           //1
            list.add(Obj);                               //2
        }
        System.out.println(list);                       //3
    }
    public static void main(String ar[])
    {
    }
}

```

At which line of code will the Obj object become a candidate for garbage collection?

- A. At the line marked as 1.
- B. ☒ The object Obj is not a candidate for garbage collection.
- C. At the line marked as 2.
- D. At the line marked as 3.

### QUESTION 43

Q 43: Jude works as a Programmer for TimeNet Inc. She writes the following program:

```

class First {
    private int val;
    public First(int val) {
        this.val=val;
    }
    public void setVal (int val) {
        this.val = val;
    }
    public int getVal () { return val; }
}
public class C15 {
    static First fun(First f){
        f=new First(100);
        return f;
    }
    public static void main( String[] args) {

```

```

    First f = new First(345);
    System.out.print(f.getVal()+" ");
    First f1=fun(f);
    System.out.print(f1.getVal()+" ");
    f=fun(f1);
    System.out.print(f1.getVal()+" ");
}
}

```

**What will happen when she tries to compile and execute the preceding program?**

- A. It will produce the output as:  
345 345 100
- B. ☒ It will produce the output as:  
345 100 100
- C. It will produce the output as:  
100 100 100
- D. It will generate a compilation error.

#### QUESTION 44

**Q 44: Mr. Smith works for High tech Inc. He is presently working on an application. There is a class named Automobile.Vehicle.Car in the jar file Car.jar. Now, he wants to run the main() method of the Car class on a Unix system by giving the following command:**

```
Java Automobi l e. Vehi cl e. Car
```

**How can he do that?**

- A. By putting Car.jar in directory /stuff/java/ Automobile/ Vehicle and by setting CLASSPATH including /stuff/java/Car.jar
- B. ☒ By putting Car.jar in directory /stuff/java and by setting CLASSPATH including /stuff/java/Car.jar
- C. By putting Car.jar in directory /stuff/java/ Automobile/ Vehicle and by setting CLASSPATH including /stuff/java/\*.jar
- D. There is no way to do that.

#### QUESTION 45

**Q 45: Ria works for NetTech Inc. She is presently working on a project that uses a class named Room. The Room class needs to access another class named Door. The Door class is defined in the JAR file myLib.jar. Which of the following will allow her to do the same at the time of compilation?**

- A. If JAR file is located at \$JAVA\_HOME/jre/lib/ext/ myLib.jar and class Door is compiled using javac -classpath/lib/mylib.jar
- B. If JAR file is located at \$JAVA\_HOME/jre/classes/myLib.jar and class Door is compiled using javac -classpath/lib/mylib.jar
- C. If JAR file is located at \$JAVA\_HOME/jre/lib/myLib.jar and class Door is compiled using javac -classpath/lib/mylib.jar
- D. ☒ If JAR file is located at /mine/myLib.jar and the class Door is compiled using

```
j avac -cl asspath/mi ne/myLi b. j ar Door. j ava
```

#### QUESTION 46

**Q 46: Kanishk works as a Programmer for HeadNet Inc. He writes the following program:**

```

package com.kogent;
class Test {
public static void main(String ar[]) {
//code
}
}

```

**The class Test exists in the directory /mine/com/kogent . If CLASSPATH is set to "."(current directory). Which of the following will allow him to run the Test class?**

- A. If class com.kogent.Test is run from com/kogent directory.
- B. If class mine.com.kogent.Test is run from /mine directory



- ☒ C. If class com.kogent.Test is run from /mine directory  
☒ D. If class -classpath/mine com.kogent.Test is run from any directory.

### QUESTION 47

**Q 47: Kandy works as a Programmer for StrongNet Inc. She writes the following program:**

```
class Test19 {
    public int tester(String str) {
        if(str == null || str.length() == 0) {
            System.out.println("empty");
            return 0;
        }
        Else {
            System.out.println("not empty");
            return 1;
        }
    }

    public static void main(String ar[]) {
        Test19 ob = new Test19();
        ob.tester("hi");
        ob.tester("");
    }
}
```

**What will happen when she tries to compile and execute the preceding program?**

- ☒ A. It will produce the output as:  
not empty  
empty  
C. It will give compilation error.
- B. It will produce the output as:  
not empty  
not empty  
D. It will throw a runtime exception.

### QUESTION 48

**Q 48: Mary works as a Programmer for Time Inc. She writes the following program:**

```
class Tester20 {
    public static void meth(String str) {
        int check = 4;
        if (check == str.length()) {
            System.out.print(str.charAt(check - 1) + ", ");
        } else {
            System.out.print(str.charAt(0) + ", ");
        }
    }

    public static void main(String ar[]) {
        meth("funky");
        meth("tangy");
        meth("rocky");
    }
}
```

**What will happen when she tries to compile and execute the preceding program?**

- A. It will produce the output as:  
r, t, f  
C. It will generate a compilation error.
- ☒ B. It will produce the output as:  
f, t, r  
D. It will throw a runtime exception.

### QUESTION 49

**Q 49: Arvind works as a Java Programmer for Tech Inc. He writes the following program:**

```
public class Check21 {
    public Integer val;
    public void fun1() {
        Integer grade1 = new Integer(25);
        val = grade1;
        fun2(grade1);
    }

    private void fun2(Integer grade2) {
        grade2 = grade2.intValue();
        if(grade2==val) {
            System.out.println("equal");
        }
    }
}
```

```

    }
    Else {
    System.out.println("not equal");
    }
    }
    public static void main(String ar[]) {
    Check21 c=new Check21();
    c.fun1();
    }
    }

```

What will happen when he tries to compile and execute the preceding program?

- ☒ A. It will produce the output as:  
not equal
- ☐ B. It will produce the output as:  
equal
- ☐ C. It will generate a compilation error.
- ☐ D. It will throw a runtime exception.

### QUESTION 50

Q 50: Rashmi works as a Programmer for High Net Inc. She writes the following program:

```

class Main {
}
class B extends Main {
    public void meth(B c) {
        if(c instanceof Main) {
            System.out.println("1");
        }
        if(c instanceof B) {
            System.out.println("2");
        }
        else
            System.exit(0);
    }
    public static void main(String ar[]) {
        B b = new B();
        b.meth(b);
    }
}

```

What will happen when she tries to compile and execute the preceding program?

- ☒ A. It will produce the output as:  
1  
2
- ☐ B. It will produce the output as:  
2
- ☐ C. It will generate a compilation error.
- ☐ D. It will throw a runtime exception.

### QUESTION 51

Q 51: Imagine you work as a programmer in the ABC Company. You write the following program:

```

public class A {
    public enum Cars {ferari, maruti, omni};
    public static void main(String [] args) {
        Cars mycar = Cars.ferari;
        switch (mycar) {
            case ferari:
                System.out.print("ferari ");
            default case:
                System.out.print("mercedez ");
            case maruti:
                System.out.print("maruti ");
        }
    }
}

```

What will happen when you try to compile and execute the preceding program?

- ☐ A. It will produce the output as:  
Feraari
- ☐ B. It will produce the output as:  
mercedez
- ☐ C. It will produce the output as:  
true false done
- ☒ D. It will generate compilation error.

**QUESTION 52**

**Q 52:** Neha works as a programmer in the ABC Company and she has written the following program:

```
public class Foo {  
    public static void main(String s[]) {  
        Integer i = new Integer(1) + new Integer(2);  
        switch(i) {  
            case 3: System.out.println("three"); break;  
            default: System.out.println("other"); break;  
        }  
    }  
}
```

What will be the output when the preceding program is compiled and executed?

- A. two    ☒ B. three    C. other    D. program will not compile successfully.

**QUESTION 53**

**Q 53:** Imagine you work as a programmer in the ABC Company and you have written the following program:

```
public class Foo {  
    public static void main(String s[]) {  
        String str = "null";  
        if (str == null) {  
            System.out.println("null");  
        }  
        else (str.length() == 0) {  
            System.out.println("zero");  
        }  
        else {  
            System.out.println("some");  
        }  
    }  
}
```

What will be the output when the preceding program is compiled and executed?

- A. zero    B. sum    C. other    ☒ D. Program will not compile successfully.

**QUESTION 54**

**Q 54:** Peter works as a programmer in the ABC Company and has written the following program:

```
public class MyClass {  
    public static void main(String s[]) {  
        int x = 0;  
        int y = 10;  
        do {  
            y--;  
            ++x;  
        } while (x < 5);  
        System.out.print(x + " , " + y);  
    }  
}
```

What will be the output when the preceding program is compiled and executed?

- A. zero    B. sum    C. other    ☒ D. Program will not compile successfully.

**QUESTION 55**

**Q 55:** Imagine you work as a programmer in the ABC Company and you have written the following program:

```
class Next {  
    public static void main(String s[]) {  
        int x=12;  
        while (x < 10) {  
            x--;  
        }  
        System.out.print(x);  
    }  
}
```

What will be the output when the preceding program is compiled and executed?

- A. 11    ☒ B. 12    C. 23    D. Program will not compile successfully.

### QUESTION 56

Q 56: Imagine you work as a programmer in the ABC Company and you have written the following program:

```
class Test {
    public static void main(String s[]) {
        int x = 10;
        do {
            System.out.println(x--);
        }
        while(x>10);
    }
}
```

How many times will the value of x be printed after compilation and execution of the preceding program?

- A. more than 10    B. 1    C. 2    D. Program will not compile successfully.

### QUESTION 57

Q 57: Parul works as a programmer in the ABC Company and has written the following program:

```
import java.util.*;
class Col {
    public static Collection get() {
        Collection sorted = new LinkedList();
        sorted.add("B"); sorted.add("C"); sorted.add("A");
        return sorted;
    }
    public static void main(String[] args) {
        for (Object obj: get()) {
            System.out.print(obj + ",");
        }
    }
}
```

What will be the output after compilation and execution of the preceding program?

- A. A, B, C    B. C, A, B    ☒ C. B, C, A    D. Program will not compile successfully.

### QUESTION 58

Q 58: Imagine you work as a programmer in the ABC Company and you have written the following program:

```
class Test {
    public static void main(String[] args) {
        for (int i = 0; i <=10; i++){
            if( i > 6) break;
        }
        System.out.println(i);
    }
}
```

What will be the output after compilation and execution of the preceding program?

- A. 123    B. 1234    C. 44    ☒ D. Program will not compile successfully.

### QUESTION 59

Q 59: Neha works as a programmer in the ABC Company and has written the following program:

```
class A {
    public Boolean testIfB(String str)
    {
        return Boolean.valueOf(str);
    }
    public void testIfA() {
        if(testIfB("True"))
            System.out.println("true");
    }
}
```

```

    else
    {
        System.out.println("not true");
    }
    public static void main(String s[]) {
        A obj = new A();
        obj.testIFA();
    }
}

```

What will be the output after compilation and execution of the preceding program?

- ☒ A. true      B. false      C. not true      D. Program will not compile successfully.

### QUESTION 60

Q 60: Imagine you work as a programmer in the ABC Company and you have written the following program:

```

class Testing {
    public static void main(String s[]) {
        Float pi = new Float(3.14f);
        if(pi>3) {
            System.out.print("pi is big");
        }
        else {
            System.out.print("pi is not big");
        }
        finally {
            System.out.println("Have a nice day.");
        }
    }
}

```

What will be the output after compilation and execution of the preceding program?

- A. pi is big      B. pi is not big      C. Have a nice day      ☒ D. Program will not compile successfully.

### QUESTION 61

Q 61: Imagine you work as a programmer in the ABC Company and you have written the following program:

```

class A {
    public static void main(String s[]) {
        assert s.length == 1;
    }
}

```

Which of the following will generate an assertion error?

- ☒ A. java -ea A      B. java test      ☒ C. java -ea A 1 2 3      D. Program will not compile successfully.

### QUESTION 62

Q 62: Parul works as a programmer in the ABC Company and has written the following program:

```

class Foo {
    public static void main(String [] args) {
        int x= 5;
        int y= 7;
        assert (x> y): "stuff";
        System.out.println("passed");
    }
}

```

What will be the output after compilation and execution of the preceding program?

- A. It will display stuff as output.      ☒ B. It will display passed as output.  
C. It will throw runtime exception      D. Program will not compile successfully.

### QUESTION 63

Q 63: Santosh works as an Application Developer for Kogent Solutions Inc. He writes the following program:

```
public class Test {
    public static void main(String str[]) {
        System.out.println(new StringBuffer("teacher").replace(0, 1, "ch").replace(
            4, 6, "t").toString());
    }
}
```

What will happen when he tries to compile and execute the preceding program?

- A. It will produce the output as "teater".
- B. It will produce the output as "cheacher".
- ☒ C. It will produce the output as "cheater".
- D. It will generate a compile-time error.

### QUESTION 64

Q 64: Shilpa works as a Programmer for Kogent Solutions Inc. She writes the following program:

```
public class Test {
    public static void main(String str[]) {
        System.out.println(new StringBuffer("SCJP6 Exam").deleteCharAt(5).substring(
            3, 5));
    }
}
```

What will happen when she tries to compile and execute the preceding program?

- A. It will produce the output as "P".
- B. It will produce the output as "PE".
- ☒ C. It will produce the output as "P6".
- D. It will generate a compile-time error.

### QUESTION 65

Q 65: Peter works as a Programmer in the ABC Company. He writes the following program:

```
class Test{
    public void process() { System.out.print("A,"); }
    public static void main(String[] args) {
        try { new b().process(); }
        catch (Exception e) { System.out.println("Excepti on"); } }
}
class b extends Test {
    public void process() {
        System.out.print("B");
    }
}
```

What will happen when he tries to compile and execute the preceding program?

- A. It will produce the output as: A B
- B. It will produce the output as: A
- ☒ C. It will produce the output as: B
- D. It will give compilation error.

### QUESTION 66

Q 66: Imagine you work as a programmer in the ABC Company. You write the following program:

```
class Test{
    public void process() { System.out.print("A,"); }
    public static void main(String[] args) {
        try { new b().process(); }
        catch (Exception e) { System.out.println("Excepti on"); } }
}
class b extends Test {
    public void process() {
        super.process();
        System.out.print("B");
    }
}
```

---

}

---

**What will happen when you try to compile and execute the preceding program?**

- ☒ A. It will produce the output as:  
A, B
- ☐ B. It will produce the output as:  
A
- ☐ C. It will produce the output as:  
B
- ☐ D. It will give compilation error.

### QUESTION 67

**Q 67: Parul works as a Programmer in the ABC Company. She writes the following program:**

---

```

class Acid {
    public void process() { System.out.print("A "); }
    public static void main(String[] args) {
        try { ((Acid)new B()).process(); }
        catch (Exception e) { System.out.print("Exception "); }
    }
}

class B extends Acid {
    public void process() throws RuntimeException
    {
        super.process();
        if (true) throw new RuntimeException();
        System.out.print("B"); }
    }
}

```

---

**What will happen when she tries to compile and execute the preceding program?**

- ☒ A. It will produce the output as:  
A Exception
- ☐ B. It will produce the output as:  
B
- ☐ C. It will produce the output as:  
B Exception
- ☐ D. It will generate a compilation error.

### QUESTION 68

**Q 68: Maya works as a Programmer in the ABC Company. She writes the following program:**

---

```

public class Acid {
    void process() throws Exception { throw new Exception(); }
    public static void main(String[] args) {
        new B().process();
    }
    static class B extends Acid {
        void process() { System.out.println("B"); }
    }
}

```

---

**What will happen when she tries to compile and execute the preceding program?**

- ☐ A. It will produce the output as:  
A Exception
- ☒ B. It will produce the output as:  
B
- ☐ C. It will produce the output as:  
B Exception
- ☐ D. It will generate a compilation error.

### QUESTION 69

**Q 69: Imagine you work as a Programmer in ABC Company and you have written the following program:**

---

```

static class Acid { //1
    void process() throws Exception { throw new Exception(); }
}
static class Test extends Acid { //2
    void process() { System.out.println("B"); }
    public static void main(String[] args) {
        new Test().process();
    }
}

```

---

What will happen when you try to compile and execute the preceding program?

- A. It will produce the output as:  
A Exception
- B. It will produce the output as:  
B
- C. It will produce the output as:  
B Exception
- ☒ D. It will generate a compilation error, as modifier static is not allowed at lines 1 and 2.

### QUESTION 70

Q 70: Suman works as a Programmer in the ABC Company. He writes the following program:

```
class Test {
    public static void main(String[] args) {
        try {
            args = null;
            args[0] = "test";
            System.out.println(args[0]);
        } catch (Exception ex) {
            System.out.println("Exception");
        }
    }
}
```

What will happen when he tries to compile and execute the preceding program?

- ☒ A. It will produce the output as:  
Exception
- B. It will produce the output as:  
B
- C. It will produce the output as:  
B Exception
- D. It will generate a compilation error.

### QUESTION 71

Q 71: Amit works as a Programmer for CompNet Inc. He writes the following program:

```
import java.util.*;
public class Test {
    public static void main(String str[]) {
        String scn="Sun, Mon, Tues, Wed, Thurs, Fri, Sat";
        Scanner scan=new Scanner(scn);
        scan.useDelimiter(",");
        while(scan.hasNext()) {
            System.out.println(scan.nextInt()+" ");
        }
    }
}
```

What will happen when he tries to compile and execute the preceding program?

- A. It will produce the output as:  
Sun, Mon, Tues, Wed, Thurs, Fri, Sat
- B. It will produce the output as:  
Sun
- C. It will produce the output as:  
Sun  
Mon  
Tues  
Wed  
Thurs  
Fri  
Sat
- ☒ D. It will throw a runtime exception-InputMismatchException.

### QUESTION 72

Q 72: Imagine you are a software developer in ABC. Company and write the following program for your project:

```
class FloatingPointRep {
    public static void main(String ar[]) {
        float height=6.45; // this statement will generate error
        System.out.println("Height= "+height);
    }
}
```



```
        }  
    }
```

---

**What will happen when you compile and execute the preceding program?**

- ☒ A. The program generates compile time error.
- ☐ B. The program compiles successfully and displays nothing as output.
- ☐ C. The program compiles successfully but generates runtime exception.
- ☐ D. The program compiles successfully and displays Height = 6.45 as output.