Started on	Thursday, 12 May 2022, 10:24 AM
State	Finished
Completed on	Thursday, 12 May 2022, 11:20 AM
Time taken	56 mins 9 secs
Marks	19.00/25.00
Grade	**76.00** out of 100.00

```
x = 40
y = 35
z = 20
w = 10


If these are the values assigned, comment on the output of these two statements.


Statement 1: print x * y / z w
Statement 2: print x * y / (z w)
```

Select one:

a.

```
Change by 50
```

b.

```
Will remain the same
```

c.

The output will change by 80

d.

Change by 160

The correct answer is:

The output will change by 80

```
class One extends Thread {
public void run() {
for(int i=0;i<2;i++)
System.out.print(i);
}
}
}

public class Test{
public static void main(String [] args) {
Test t= new Test();
t.call(new One());
}
public void call(One n){
o.start();
}
}
```

Select one:

○ **a.**

> None of these

◉ **b.**

> Compilation fails

○ **c. 0 0**

○ **d. 0 1**

The correct answer is: 0 1

```java
import java.io.*;
class Keyboard { }
public class Computer implements Serializable {
private Keyboard k = new Keyboard();
public static void main(String[] args) {
Computer c = new Computer();
c.storeIt(c);
}
void storeIt(Computer c) {
try {
ObjectOutputStream os = new ObjectOutputStream(
new FileOutputStream("myFile"));
os.writeObject(c);
os.close();
System.out.println("done");
} catch (Exception x) {System.out.println("exc"); }
}
}
What is the result? (Choose all that apply.)
```

Select one:

- ○ a. done

- ○ b.

    > Compilation fails

- ● c. exc

- ○ d.

    > Exactly one object is serialized

- ○ e.

    > Exactly two objects are serialized

The correct answer is: exc

```
integer fun(integer c)
        print c
            if(c<3)
                c=c+2
                    fun(fun(c))
            end if
            return c
    end function fun

what is the output when c=1
```

Select one:

- ○ a. 1 3 5

○ b. 1
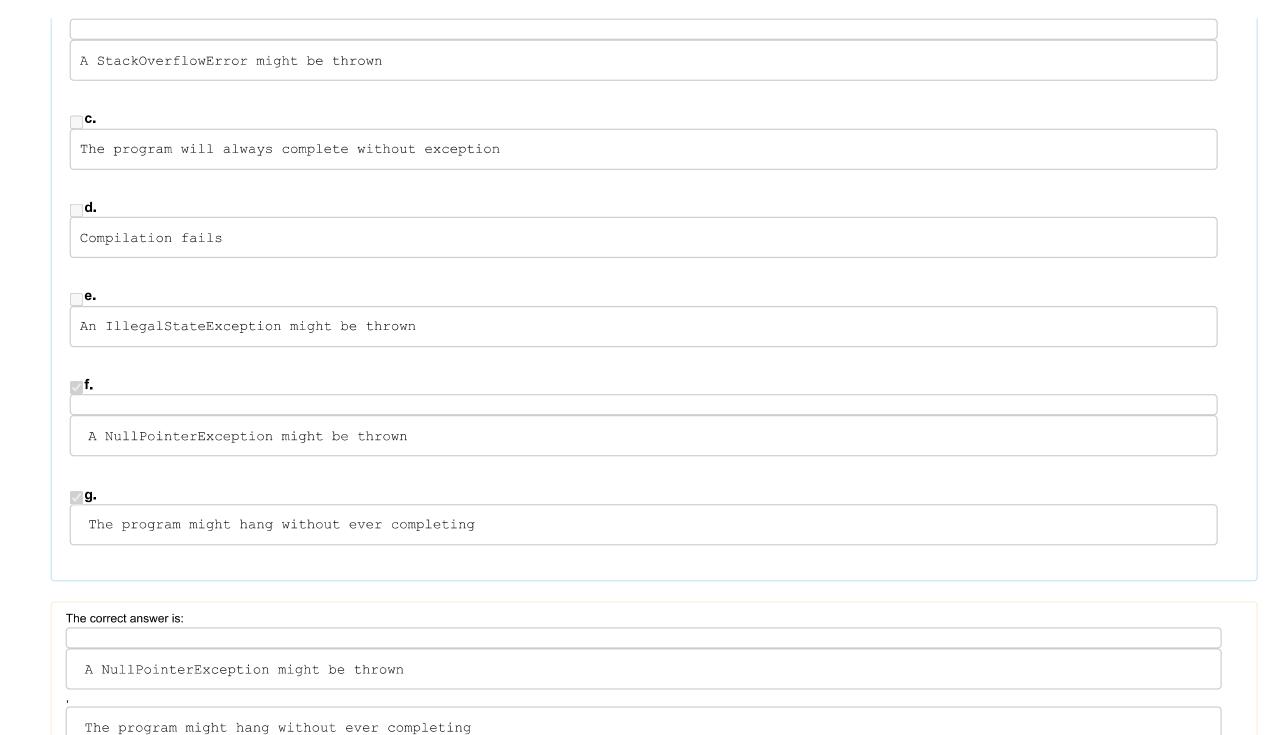
◉ c. 1 3 3

○ d. 3

The correct answer is: 1 3 3

```
Given:
3. class Infinity { }
4. public class Beyond extends Infinity {
5. static Integer i;
6. public static void main(String[] args) {
7. int sw = (int)(Math.random() * 3);
8. switch(sw) {
9. case 0: { for(int x = 10; x > 5; x++)
10. if(x > 10000000) x = 10;
11. break; }
12. case 1: { int y = 7 * i; break; }
13. case 2: { Infinity inf = new Beyond();
14. Beyond b = (Beyond)inf; }
15. }
16. }
17. }
And given that line 7 will assign the value 0, 1, or 2 to sw, which are true? (Choose all that apply.)
```

Select one or more:

☐ a.

```
    A ClassCastException might be thrown
```

☐ b.

A StackOverflowError might be thrown

c.

The program will always complete without exception

d.

Compilation fails

e.

An IllegalStateException might be thrown

f.

 A NullPointerException might be thrown

g.

 The program might hang without ever completing

The correct answer is:

 A NullPointerException might be thrown

,

 The program might hang without ever completing

A Class consists of which of these abstractions?

Select one:

○ **a.**

All of the mentioned

○ **b.**

Operations

○ **c.**

Attributes

○ **d.**

Set of the objects

○ **e.**

Both Operations and Attributes

The correct answer is:

All of the mentioned

In which area of a class are function and data directly accessible, even outside the class?

Select one:

a.

Protected

b.

Public

c.

None

d.

Private

The correct answer is:

Public

```
fun(str a)
    IF(str equals null)
       return
    END IF
     fun(a+1)
     fun(a+1)
    print a
end FUN

input a="pqr"

Here a+1 means it will go index of a
if a="abc" a+1 means it will start from "b"
```

Select one:

a.
```
pqrrrqrrrqrpqr
```

b.
```
rrqrrrqrpqr
```

c.
```
None of these
```

d.
```
fun never terminates
```

e.
```
rrqrrrqr
```

The correct answer is:

rrqrrrqrpqr

```
3.  import java.util.*;
4.  public class Looking {
5.  public static void main(String[] args) {
6.  String input = "1 2 a 3 45 6";
7.  Scanner sc = new Scanner(input);
8.  int x = 0;
9.  do {
10. x = sc.nextInt();
11. System.out.print(x + " ");
12. } while (x!=0);
13. }
14. }

What is the result?
```

Select one:

○ **a.**

1 2 followed by an exception

○ **b.**

1 2

○ **c.**

d.

```
1 2 3 45 6
```

e.

```
1 2 a 3 45 6
```

f.

```
1 2 3 4 5 6
```

g.

```
Compilation fails
```

The correct answer is:

```
1 2 followed by an exception
```

```
5) Given:
3. public class Ebb {
4. static int x = 7;
5. public static void main(String[] args) {
6. String s = "";
7. for(int y = 0; y < 3; y++) {
8. x++;
9. switch(x) {
10. case 8: s += "8 ";
11. case 9: s += "9 ";
12. case 10: { s+= "10 "; break; }
13. default: s += "d ";
14. case 13: s+= "13 ";
15. }
16. }
17. System.out.println(s);
18. }
19. static { x++; }
20. }

What is the result?
```

Select one or more:

a.

```
Compilation fails
```

b.

```
9 10 10 d 13
```

c.

```
8  9  10  d
```

d.
```
8  9  10  9  10  10  d  13
```

e.

```
   9  10  10  d
```

f.
```
8  9  10  10  d  13
```

g.
```
9  10  d
```

The correct answer is:
```
9  10  10  d  13
```

```
3. public class McGee {
4. public static void main(String[] args) {
5. Days d1 = Days.TH;
6. Days d2 = Days.M;
7. for(Days d: Days.values()) {
8. if(d.equals(Days.F)) break;
9. d2 = d;
10. }
11. System.out.println((d1 == d2)?"same old" : "newly new");
12. }
13. enum Days {M, T, W, TH, F, SA, SU};
14. }

What is the result?
```

Select one:

a.

```
Compilation fails due only to an error on line 11
```

b.

```
same old
```

c.

```
Compilation fails due only to an error on line 8
```

d.

```
Compilation fails due to multiple errors
```

e.

```
newly new
```

f.

Compilation fails due only to an error on line 13

g.

Compilation fails due only to an error on line 7

The correct answer is:

same old

Which keyword when applied on a method indicates that only one thread should execute the method at a time. Select the one correct answer.

Select one:

a.

static

b.

native

c.

volatile

○ **d.**

synchronized

○ **e.**

transient

The correct answer is:

synchronized

```
 Given:

3. class SubException extends Exception { }
4. class SubSubException extends SubException { }
5.
6. public class CC { void doStuff() throws SubException { } }
7.
8. class CC2 extends CC { void doStuff() throws SubSubException { } }
9.
10. class CC3 extends CC { void doStuff() throws Exception { } }
11.
12. class CC4 extends CC { void doStuff(int x) throws Exception { } }
13.
14. class CC5 extends CC { void doStuff() { } }

What is the result? (Choose all that apply.)
```

Select one:

a.

Compilation fails due to an error on line 8

b.

Compilation fails due to an error on line 14

c.

Compilation succeeds

d.

Compilation fails due to an error on line 12

e.

Compilation fails due to an error on line 10

The correct answer is:

Compilation fails due to an error on line 10

```
Given:
3. public class Wind {
4. public static void main(String[] args) {
5. foreach:
6. for(int j=0; j<5; j++) {
7. for(int k=0; k< 3; k++) {
8. System.out.print(" " + j);
9. if(j==3 && k==1) break foreach;
10. if(j==0 || j==2) break;
11. }
12. }
13. }
14. }
What is the result?
```

Select one:

○ **a. 0 1 2 3**

○ **b.**

```
1 1 1 3 3
```

○ **c.**

```
1 1 1 3 3 4 4 4
```

d.
```
0 1 1 1 2 3 3
```

e.
```
0 1 1 1 2 3 3 4 4 4
```

The correct answer is:
```
0 1 1 1 2 3 3
```

What is the numerical range of char?

Select one:

a.
```
0 to 65535
```

b.
```
0 to 32767
```

c.
```
-256 to 255
```

d.

```
-32768 to 32767
```

```
void reverse(Integer n)
  IF N GREATER THAN 5 THEN
   EXIT
    END IF
    print n
      Return Reverse(n++)
    END REVERSE
```

Select one:

a.

```
1 24 6 8
```

b.

```
1 2 5 3 4
```

c.

```
1 2 3 4 5
```

d. None of these

```
4. public class SpecialOps {
5. public static void main(String[] args) {
6. String s = "";
7. Boolean b1 = true;
8. Boolean b2 = false;
9. if((b2 = false) | (21%5) > 2) s += "x";
10. if(b1 || (b2 = true)) s += "y";
11. if(b2 == true) s += "z";
12. System.out.println(s);
13. }
14. }
```

Which are true? (Choose all that apply.)

Select one:

- a.

  x will be included in the output

- b.

  z will be included in the output

- c.

  y will be included in the output

- d.

  An exception is thrown at runtime

The correct answer is:

y will be included in the output

```
public abstract class Test implements Runnable
{
  public void m1() { }
}
```

Select one:

○ a.

Compilation fails because it didnt implement run method

○ b.

None of these

○ c.

Compilation fails because it didnt contain abstract methods

◉ d.

compiles fine

The correct answer is:

compiles fine

```
class Bar { }
class Test
{
    Bar doBar()
    {
        Bar b = new Bar(); /* Line 6 */
        return b; /* Line 7 */
    }
    public static void main (String args[])
    {
        Test t = new Test();   /* Line 11 */
        Bar newBar = t.doBar();   /* Line 12 */
        System.out.println("newBar");
        newBar = new Bar(); /* Line 14 */
        System.out.println("finishing"); /* Line 15 */
    }
}

At what point is the Bar object, created on line 6, eligible for garbage collection?
```

Select one:

○ **a.**

after line 15, when main() completes

○ **b.**

after line 7, when doBar() completes

○ **c.**

after line 12

◉ **d.**

after line 14

The correct answer is:

after line 14

```
Given:
3. public class Theory {
4. public static void main(String[] args) {
5. String s1 = "abc";
6. String s2 = s1;
7. s1 += "d";
8. System.out.println(s1 + " " + s2 + " " + (s1==s2));
9.
10. StringBuffer sb1 = new StringBuffer("abc");
11. StringBuffer sb2 = sb1;
12. sb1.append("d");
13. System.out.println(sb1 + " " + sb2 + " " + (sb1==sb2));
14. }
15. }
Which are true? (Choose all that apply.)
```

Select one or more:

a.

The second line of output is abcd abc false

b.

Compilation fails

c.

The first line of output is abcd abc false

d.

The first line of output is abc abc true

e.

The first line of output is abc abc false

f.

The second line of output is abcd abcd true

g.

The second line of output is abcd abcd false

The correct answer is:

The first line of output is abcd abc false

,

The second line of output is abcd abcd true

```
Integer j=41,k=37
Assign j to j+1
Assign k to k-1
Assign j to j/k
Assign k to k/j
Print the value of k,j
```

Select one:

○ a. 1 1

◉ b.

```
1 36
```

○ c. 42 36

○ d. 36 1

The correct answer is:

```
1 36
```

```
Given:
3. public class Spock {
4. public static void main(String[] args) {
5. int mask = 0;
6. int count = 0;
7. if( ((5<7) || (++count < 10)) | mask++ < 10 ) mask = mask + 1;
8. if( (6 > 8) ^ false) mask = mask + 10;
9. if( !(mask > 1) && ++count > 1) mask = mask + 100;
10. System.out.println(mask + " " + count);
11. }
12. }

Which two answers are true about the value of mask and the value of count at line 10?
(Choose two.)
```

Select one or more:

a.

mask is 1

b. ☑

mask is 2

c.

mask is 10

d.

mask is greater than 10

e.

mask is greater than 0

- [ ] **f.**

  mask is 0

- [x] **g.**

  count is 0

The correct answer is:

mask is 2

,

count is 0

```
Given:
3. import java.io.*;
4. class Vehicle { }
5. class Wheels { }
6. class Car extends Vehicle implements Serializable { }
7. class Ford extends Car { }
8. class Dodge extends Car {
9. Wheels w = new Wheels();
10. }
Instances of which class(es) can be serialized? (Choose all that apply.)
```

Select one or more:

- [x] **a.**

Dodge

Wheels

☑ **c. car**

☑ **d. ford**

☐ **e.**

Vehicle

The correct answer is: car, ford

```
 Given:
3. public class OverAndOver {
4. static String s = "";
5. public static void main(String[] args) {
6. try {
7. s += "1";
8. throw new Exception();
9. } catch (Exception e) { s += "2";
10. } finally { s += "3"; doStuff(); s += "4";
11. }
12. System.out.println(s);
13. }
14. static void doStuff() { int x = 0; int y = 7/x; }
15. }
What is the result?
```

Select one:

a.

Compilation fails

b.

1234 followed by an exception

c.

123 followed by an exception

d.

13

e.

1234

f. 123

g.

An exception is thrown with no other output

h. 12

The correct answer is:

An exception is thrown with no other output

```
Given:
3. public class Circles {
4. public static void main(String[] args) {
5. int[] ia = {1,3,5,7,9};
6. for(int x : ia) {
7. for(int j = 0; j < 3; j++) {
8. if(x > 4 && x < 8) continue;
9. System.out.print(" " + x);
10. if(j == 1) break;
11. continue;
12. }
13. continue;
14. }
15. }
16. }

What is the result?
```

Select one:

- **a.**

  1 3 3 9 9

- **b. 5 5 7 7**

- **c.**

  Compilation fails

- **d.**

  1 3 9

- **e.**

  1 1 3 3 9 9

f.

1 1 1 3 3 3 9 9 9

The correct answer is:

1 1 3 3 9 9

Version 4.2