Started on	Wednesday, 4 February 2026, 4:26 PM
State	Finished
Completed on	Wednesday, 4 February 2026, 4:39 PM
Time taken	13 mins 11 secs
Marks	17.00/20.00
Grade	**85.00** out of 100.00

Question 1

Complete

Mark 1.00 out of 1.00

What is the output of the following code?

3: byte a = 40, b = 50;

4: byte sum = (byte) a + b;

5: System.out.println(sum);

☐ a. 90

☑ b. The code will not compile because of line 4.

☐ c. An undefined value.

☐ d. 50

☐ e. 40

Question 2

Complete

Mark 1.00 out of 1.00

What is the output of the following code snippet?

3: boolean x = true, z = true;

4: int y = 20;

5: x = (y != 10) ^ (z=false);

6: System.out.println(x+", "+y+", "+z);

☐ a. The code will not compile because of line 5.

☐ b. false, 20, true

☐ c. false, 20, false

☑ d. true, 20, false

☐ e. false, 20, true

☐ f. true, 10, true

Which of the following are true? (Choose all that apply)

```
public class Bunny {
    public static void main(String[] args) {
        Bunny bun = new Bunny();
    }
}
```

- ☐ a. main is a class.
- ☐ b. Bunny is a reference to an object.
- ☐ c. bun is a class.
- ☑ d. Bunny is a class.
- ☑ e. bun is a reference to an object.
- ☐ f. main is a reference to an object.
- ☐ g. None

Which statements about switch are correct?

- ☑ a. Cases must be constant expressions.
- ☑ b. switch can take String values.
- ☐ c. switch requires a default case.
- ☐ d. break is necessary to prevent fall-through.

What is the output of the following code?

```
1: public class TernaryTester {
2:   public static void main(String[] args) {
3:     int x = 5;
4:     System.out.println(x > 2 ? x < 4 ? 10 : 8 : 7);
5: }}
```

- ☐ a. 5
- ☑ b. 8
- ☐ c. 7
- ☐ d. 4
- ☐ e. 10
- ☐ f. The code will not compile because of line 4.

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?

- a. Compilation fails
- ☑ b. 0 1 1 1 2 3 3
- c. 0 1 1 1 2 3 3 4 4 4
- d. 1 1 1 3 3
- e. 0 1 2 3
- f. 1 1 1 3 3 4 4 4

What is the output of the following code snippet?

3: int x = 4;

4: long y = x * 4 - x++;

5: if(y<10) System.out.println("Too Low");

6: else System.out.println("Just right");

7: else System.out.println("Too High");

- a. Just Right
- b. Compiles but throws a NullPointerException.
- ☑ c. The code will not compile because of line 7
- d. Too Low
- e. The code will not compile because of line 6.
- f. Too High

Given the following class,

which of the following lines of code can replace INSERT CODE HERE

to make the code compile? (Choose all that apply)

public class Price {

    public void admission() {

        INSERT CODE HERE

      System.out.println(amount);

   }}

☑ a. int amount = 0xE;

☐ b. int amount = 9L;

☐ c. int amount = 1_2_;

☑ d. double amount = 0xE;

☑ e. int amount = 0b101;

☐ f. None

☑ g. double amount = 1_2_.0_0;

Given:

class Hexy {

 public static void main(String[] args) {

  Integer i = 42;

  String s = (i<40)?"life": (i>50)?"universe":"everything";

  System.out.println(s);

 }

}

What is the result?

☐ a. Compilation fails

☐ b. life

☐ c. universe

☐ d. null

☑ e. everything

☐ f. An exception is thrown at runtime

How many times will the following code print "Hello World"?

3: for(int i=0; i<10 ;) {

4:   i = i++;

5:   System.out.println("Hello World");

6: }

- [ ] a. The code will not compile because of line 3.
- [ ] b. The code will not compile because of line 5.
- [ ] c. 10
- [ ] d. 9
- [x] e. The code contains an infinite loop and does not terminate.
- [ ] f. 11

Given:

class Fork {

 public static void main(String[] args) {

   if(args.length == 1 | args[1].equals("test")) {

    System.out.println("test case");

   } else {

    System.out.println("production " + args[0]);

   }

 }

}

And the command-line invocation:

java Fork live2

What is the result?

- [ ] a. test case
- [x] b. An exception is thrown at runtime
- [ ] c. production live2
- [ ] d. Compilation fails
- [ ] e. test case live2

What will be the output of the following code?

int a = 5;

System.out.println(a++ + ++a);

- [x] a. 12
- [ ] b. Compilation error
- [ ] c. 13
- [ ] d. 11

What is the output of the following code snippet?

```
3: boolean keepGoing = true;
4: int result = 15, i = 10;
5: do {
6:   i--;
7:   if(i==8) keepGoing = false;
8:   result -= 2;
9: } while(keepGoing);
10: System.out.println(result);
```

☑ a. 11

☐ b. 7

☐ c. 10

☐ d. The code will not compile because of line 8.

☐ e. 15

☐ f. 9

Given:

```
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.)

☐ a. z will be included in the output

☐ b. An exception is thrown at runtime

☑ c. y will be included in the output

☑ d. x will be included in the output

☐ e. Compilation fails

What is the output of the following code snippet?

3: int x = 0;

4: String s = null;

5: if(x == s) System.out.println("Success");

6: else System.out.println("Failure");

- ☐ a. Failure
- ☐ b. Success
- ☐ c. The code will not compile because of line 4.
- ☑ d. The code will not compile because of line 5.

What is the output of the following code snippet?

3: int x1 = 50, x2 = 75;

4: boolean b = x1 >= x2;

5: if(b = true) System.out.println("Success");

6: else System.out.println("Failure");

- ☑ a. Success
- ☐ b. The code will not compile because of line 4.
- ☐ c. The code will not compile because of line 5.
- ☐ d. Failure

Given:

```
1. class Loopy {
2.   public static void main(String[] args) {
3.     int[] x = {7,6,5,4,3,2,1};
4.     // insert code here
5.       System.out.print(y + " ");
6.   }
7. }}
```

Which, inserted independently at line 4, compiles? (Choose all that apply.)

- ☑ a. for(int y : x) {
- ☐ b. for(int y=0, int z=0; z<x.length; z++) { y = x[z];
- ☐ c. for(x : int y) {
- ☐ d. int y = 0; for(y : x) {
- ☑ e. int y = 0; for(int z=0; z<x.length; z++) { y = x[z];
- ☑ f. for(int y=0, z=0; z<x.length; z++) { y = x[z];

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?

☑ a. 9 10 10 d 13

☐ b. 8 9 10 10 d 13

☐ c. 9 10 10 d

☐ d. 9 10 d

☐ e. Compilation fails

☐ f. 8 9 10 9 10 10 d 13

☐ g. 8 9 10 d

What is the result of the following code snippet?

```
3: final char a = 'A', d = 'D';
4: char grade = 'B';
5: switch(grade) {
6:   case a:
7:   case 'B': System.out.print("great");
8:   case 'C': System.out.print("good"); break;
9:   case d:
10:  case 'F': System.out.print("not good");
11: }
```

- ☐ a. great
- ☑ b. greatgood
- ☐ c. The code will not compile because of line 3.
- ☐ d. The code will not compile because of line 6.
- ☐ e. The code will not compile because of lines 6 and 9.

What will be the output of the following program?

```
int a = 10, b = 20, c = 30;
System.out.println(a > b ? a : b > c ? b : c);
```

- ☐ a. 20
- ☑ b. 30
- ☐ c. 10
- ☐ d. Compilation error