

Computer Science - Unit 2 Exam

```
1 int j = 0, sum = 0;
  for (j = 3; j <=79; j++){
    sum = sum + j;
    System.out.println(sum);
  }
  System.out.println("The final sum is " + sum);
```

In the code segment above, what does the iteration count **start** at?

- A 0
- B 3
- C 79
- D There is no iteration count

```
2 int j = 0, sum = 0;
  for (j = 3; j <=79; j++){
    sum = sum + j;
    System.out.println(sum);
  }
  System.out.println("The final sum is " + sum);
```

In the code segment above, what does the iteration count **end** at?

- F 0
- G 3
- H 79
- J Infinite - It is an infinite loop

3 `int j = 0, sum = 0;`
`for (j = 3; j <= 79; j++){`
`sum = sum + j;`
`System.out.println(sum);`
`}`
`System.out.println("The final sum is " + sum);`

How many times will the loop iterate?

- A** 76
- B** 79
- C** 82
- D** Infinite - It is an infinite loop

4 `int j = 1;`
`while (j <= 26)`
`{`
`j = j + 2;`
`}`
`System.out.println(j);`

How many times will the loop iterate?

- F** 1
- G** 12
- H** 13
- J** Infinite - It is an infinite loop

5 `int j = 1;`
`while (j <= 26)`
`{`
`j++;`
`}`
`System.out.println(j);`

How many times will the loop iterate?

- A** 1
- B** 26
- C** 27
- D** Infinite - It is an infinite loop

6 `int j = 1;`
`do`
`{`
`j = j + 2;`
`}while (j <= 26);`
`System.out.println(j);`

How many times will the loop iterate?

- F** 1
- G** 26
- H** 27
- J** Infinite - It is an infinite loop

7 `int j = 27;`
`do`
`{`
`j = j + 2;`
`}while (j <= 26);`
`System.out.println(j);`

How many times will the loop iterate?

- A** 1
- B** 26
- C** 27
- D** Infinite - It is an infinite loop

8 `int j = 27;`
`do`
`{`
`j = j + 2;`
`}while (j >= 26);`
`System.out.println(j);`

How many times will the loop iterate?

- F** 1
- G** 26
- H** 27
- J** Infinite - It is an infinite loop

9 `for (int k = 1; k <= 5; k++)`
 `{`
 `System.out.println("Outer Loop " + k);`
 `for (int l = 1; l <= 8; l++)`
 `System.out.println("Inner Loop " + l);`
 `}`

How many times will the outer loop run?

- A** 5
- B** 8
- C** There is no outer loop
- D** Infinite - It is an infinite loop

10 `for (int k = 1; k <= 5; k++)`
 `{`
 `System.out.println("Outer Loop " + k);`
 `for (int l = 1; l <= 8; l++)`
 `System.out.println("Inner Loop " + l);`
 `}`

How many times will the inner loop run?

- F** 5
- G** 8
- H** There is no inner loop
- J** Infinite - It is an infinite loop

```
11 for (int k = 1; k <= 5; k++)  
    {  
    System.out.println("Outer Loop " + k);  
    for (int l = 1; l <= 8; l++)  
    System.out.println("Inner Loop " + l);  
    }
```

For every single outer loop iteration, how many inner loop iterations occur?

- A** 5
- B** 8
- C** 40
- D** Infinite - It is an infinite loop

```
12 for (int k = 1; k <= 5; k++)  
    {  
    System.out.println("Outer Loop " + k);  
    for (int l = 1; l <= 8; l++)  
    System.out.println("Inner Loop " + l);  
    }
```

How many times will the inner loop have run after the outer loop runs its set number of times?

- F** 5
- G** 8
- H** 40
- J** Infinite - It is an infinite loop

13 Which loop(s) check the condition BEFORE executing the loop?

- A** For Loop
- B** Do While Loop
- C** While Loop
- D** For While Loop

14 Which loop(s) check the condition AFTER executing the loop?

- F** For Loop
- G** Do While Loop
- H** While Loop
- J** For While Loop

15 *int myWalkingCounter = 0;*

int myWalkingCounterStart = 0;

myWalkingCounter = myWalkingCounter + myWalkingCounterStart;

while (myWalkingCounter <= 3)

{

myWalkingCounter++;

}

System.out.println("Stop! You have walked " + myWalkingCounter + " times!");

How many times will the above while loop execute?

- A** 0
- B** 1
- C** 2
- D** 3
- E** 4


```
16 int myWalkingCounter = 0;
    int myWalkingCounterStart = 2;
    myWalkingCounter = myWalkingCounter + myWalkingCounterStart;
    while (myWalkingCounter <= 3)
    {
    myWalkingCounter++;
    }
    System.out.println("Stop! You have walked " + myWalkingCounter + " times!");
```

How many times will the above while loop execute?

- F** 0
- G** 1
- H** 2
- J** 3
- K** 4

```
17 int myWalkingCounter = 0;
    int myWalkingCounterStart = 4;
    myWalkingCounter = myWalkingCounter + myWalkingCounterStart;
    while (myWalkingCounter <= 3)
    {
    myWalkingCounter++;
    }
    System.out.println("Stop! You have walked " + myWalkingCounter + " times!");
```

How many times will the above while loop execute?

- A** 0
- B** 1
- C** 2
- D** 3
- E** 4

18 `int myWalkingCounter = 0;`
`int myWalkingCounterStart = 0;`
`myWalkingCounter = myWalkingCounter + myWalkingCounterStart;`
`do`
`{`
`myWalkingCounter++;`
`}while (myWalkingCounter <= 3);`
`System.out.println("Stop! You have walked " + myWalkingCounter + " times!");`

How many times will the above do while loop execute?

- F** 0
- G** 1
- H** 2
- J** 3
- K** 4

19 `int myWalkingCounter = 0;`
`int myWalkingCounterStart = 4;`
`myWalkingCounter = myWalkingCounter + myWalkingCounterStart;`
`do`
`{`
`myWalkingCounter++;`
`}while (myWalkingCounter <= 3);`
`System.out.println("Stop! You have walked " + myWalkingCounter + " times!");`

How many times will the above do while loop execute?

- A** 0
- B** 1
- C** 2
- D** 3
- E** 4

- 20** What occurs if an iteration loop is entered but the condition can never be false, similar to the code below?

```
int j, sum = 0;
for (j = 12; j >=5; j++){
    sum = sum + j;
    System.out.println(sum);
}
System.out.println("The final sum is " + sum);
```

- F** the code will not compile
 - G** the code will compile, but with errors
 - H** an infinite loop is created
 - J** the compiler will adjust the code to correct the error automatically
- 21** Which adjustments could be made to ensure this loop iterates a fixed number of times?

```
int j, sum = 0;
for (j = 12; j >=5; j++){
    sum = sum + j;
    System.out.println(sum);
}
System.out.println("The final sum is " + sum);
```

- A** Line 2 - for (j = 0; j <=5; j++){
 - B** Line 2 - for (j = 0; j <=5; j--){
 - C** Line 2 - for (j = 12; j >=5; j--){
 - D** Line 2 - for (j = 0; j <=5; count++){
- 22** Which of the following is **NOT** an example of an iteration loop?
- F** walking
 - G** chewing food
 - H** yawning
 - J** breathing

- 23** What are the three parts of a for loop?
- A** Pre Condition (Initialize the Counting Variable), Exit Condition, and Post Condition (Increment the Counting Variable)
 - B** Pre Condition (Declare the Counting Variable), Exit Condition, and Post Condition (Initialize the Counting Variable)
 - C** Pre Condition (Increment the Counting Variable), Exit Condition, and Post Condition (Initialize the Counting Variable)
 - D** For Loops only have 2 parts
- 24** The iteration count of a while and do while loop is controlled inside the loop.
- F** True for BOTH
 - G** False for BOTH
 - H** True for ONLY a while loop
 - J** True for ONLY a do while loop
- 25** Which of the following are valid iteration loop structures?
- A** For Loops
 - B** While Loops
 - C** Do While Loops
 - D** For While Loops