

Started on Wednesday, 19 March 2025, 2:33 PM**State** Finished**Completed on** Wednesday, 19 March 2025, 2:40 PM**Time taken** 7 mins 34 secs**Marks** 18.00/20.00**Grade** 90.00 out of 100.00**Question 1**

Complete

Mark 1.00 out of 1.00

 [Flag question](#)

What is the default value of an instance variable in Java?

- ☒ a. Depends on the data type
- ☐ b. null
- ☐ c. 0
- ☐ d. false

Question 2

Complete

Mark 1.00 out of 1.00

 [Flag question](#)

How do you access the third element in an array in Java?

- ☐ a. myArray(3)
- ☐ b. myArray(2)
- ☐ c. myArray[3]
- ☒ d. myArray[2]

Question 3

Complete

Mark 1.00 out of 1.00

 [Flag question](#)

What is the main advantage of using a Doubly Linked List over a Singly Linked List?

- ☐ a. Doubly Linked List requires less memory
- ☒ b. Traversal in both directions is possible
- ☐ c. Faster deletion
- ☐ d. It is easier to implement

Question 4

Complete

Mark 1.00 out of 1.00

 [Flag question](#)

?

Which of the following tree traversal methods gives nodes in non-decreasing order in a Binary Search Tree (BST)?

- ☒ a. In-order
- ☐ b. Pre-order
- ☐ c. Post-order
- ☐ d. Level-order

Question 5

Complete

Mark 1.00 out of 1.00

🚩 [Flag question](#)

How do you break out of a loop in Java?

- ☒ a. break
- ☐ b. exit
- ☐ c. stop
- ☐ d. end

Question 6

Complete

Mark 1.00 out of 1.00

🚩 [Flag question](#)

In Java, which of the following is the most efficient data structure for retrieving data in constant time (on average)?

- ☐ a. LinkedList
- ☐ b. PriorityQueue
- ☒ c. HashMap
- ☐ d. TreeMap

Question 7

Complete

Mark 1.00 out of 1.00

🚩 [Flag question](#)

What is the output of the following code?

```
for (int i = 0; i < 5; i++) {  
    if (i == 2) {  
        continue;  
    }  
    System.out.print(i + " ");  
}
```

- ☐ a. 0 1 2 4
- ☒ b. 0 1 3 4
- ☐ c. 0 1 2 3 4
- ☐ d. 0 1 3

Question 8

Complete

Mark 1.00 out of 1.00

 [Flag question](#)

Which is the correct way to declare a constant in Java?

- ☐ a. static final int x = 10;
- ☐ b. constant final int x = 10;
- ☒ c. final int x = 10;
- ☐ d. constant int x = 10;

Question 9

Complete

Mark 1.00 out of 1.00

 [Flag question](#)

What is the result of the following code?

```
int[] myArray = {1, 2, 3};
```

```
myArray[1] = 4;
```

```
System.out.println(myArray[1]);
```

- ☐ a. 3
- ☒ b. 4
- ☐ c. 1
- ☐ d. 2

Question 10

Complete

Mark 1.00 out of 1.00

 [Flag question](#)

How do you find the length of an array in Java?

- ☒ a. myArray.length
- ☐ b. myArray.size()
- ☐ c. length(myArray)
- ☐ d. myArray.length()

Question 11

Complete

Mark 1.00 out of 1.00

 [Flag question](#)

What is the result of the following code?

```
String str = "Hello";
```

```
str.concat(", World!");
```


```
System.out.println(str);
```

- ☐ a. , World!
- ☐ b. Runtime Error
- ☐ c. Hello, World!
- ☒ d. Hello

Question 12

Complete

Mark 1.00 out of 1.00

 [Flag question](#)

What is the purpose of the `continue` statement in Java?

- ☐ a. None of the above
- ☒ b. Skips the rest of the code in the loop and starts the next iteration
- ☐ c. Restarts the loop from the beginning
- ☐ d. Ends the loop

Question 13

Complete

Mark 1.00 out of 1.00

 [Flag question](#)

In a directed graph, what is a cycle called where all vertices are distinct?

- ☒ a. Hamiltonian cycle
- ☐ b. Bipartite cycle
- ☐ c. Simple cycle
- ☐ d. Eulerian cycle

Question 14

Complete

Mark 1.00 out of 1.00

 [Flag question](#)

Which of the following operations is not possible on a stack?

- ☒ a. Enqueue
- ☐ b. Pop
- ☐ c. Push
- ☐ d. Peek

Question 15

Complete

Mark 1.00 out of 1.00

 [Flag question](#)


What is the purpose of the `new` keyword in Java?

- ☐ a. To initialize an array
- ☐ b. To create a new instance of a class
- ☒ c. All of the above
- ☐ d. To allocate memory for an object

Question 16

Complete

Mark 1.00 out of 1.00

 [Flag question](#)

What is the result of the following code?

```
int[] arr1 = {1, 2, 3};  
int[] arr2 = arr1;  
arr2[0] = 4;  
System.out.println(arr1[0]);
```

- ☐ a. 3
- ☐ b. 1
- ☒ c. 4
- ☐ d. 2

Question 17

Complete

Mark 1.00 out of 1.00

 [Flag question](#)

What is the result of 5 / 2 in Java?

- ☐ a. 2.5
- ☐ b. 2.0
- ☐ c. Error
- ☒ d. 2

Question 18

Complete

Mark 0.00 out of 1.00

 [Flag question](#)

What is the primary difference between a LinkedList and an ArrayList in Java?

- ☒ a. ArrayList stores objects, while LinkedList only stores primitive data types
- ☐ b. LinkedList uses a dynamic array, while ArrayList uses a doubly linked list
- ☐ c. LinkedList uses a singly linked list, while ArrayList uses a static array
- ☐ d. LinkedList uses nodes and pointers, while ArrayList uses an array

Question 19

Complete

Mark 1.00 out of 1.00

[Flag question](#)

Which of the following data structures is used to implement recursion in Java?

- ☒ a. Stack
- ☐ b. Queue
- ☐ c. Array
- ☐ d. Linked List

Question 20

Complete

Mark 0.00 out of 1.00

[Flag question](#)

What is the result of the following code?

```
int x = 5;
```

```
System.out.println(x++ + ++x);
```

- ☒ a. 13
- ☐ b. 11
- ☐ c. 12
- ☐ d. 10

[Finish review](#)