

Started on	Wednesday, 19 March 2025, 11:53 AM
State	Finished
Completed on	Wednesday, 19 March 2025, 11:58 AM
Time taken	4 mins 57 secs
Marks	13.00/20.00
Grade	65.00 out of 100.00

Question 1

Complete

Mark 1.00 out of 1.00

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 2

Complete

Mark 1.00 out of 1.00

How do you break out of a loop in Java?

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

Question 3

Complete

Mark 1.00 out of 1.00

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

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

Question 4

Complete

Mark 0.00 out of 1.00

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

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

Question 5

Complete

Mark 1.00 out of 1.00

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

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

Question 6

Complete

Mark 0.00 out of 1.00

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

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

Question 7

Complete

Mark 1.00 out of 1.00

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

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

Question 8

Complete

Mark 1.00 out of 1.00

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

Question 9

Complete

Mark 1.00 out of 1.00

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 singly linked list, while ArrayList uses a static array
- ☐ c. LinkedList uses a dynamic array, while ArrayList uses a doubly linked list
- ☒ d. LinkedList uses nodes and pointers, while ArrayList uses an array

Question 10

Complete

Mark 1.00 out of 1.00

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

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

Question 11

Complete

Mark 0.00 out of 1.00

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

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

Question 12

Complete

Mark 1.00 out of 1.00

What is the result of 5 / 2 in Java?

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

Question 13

Complete

Mark 1.00 out of 1.00

What is the result of the following code?

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

- ☒ a. 4
- ☐ b. 1
- ☐ c. 3
- ☐ d. 2

Question 14

Complete

Mark 0.00 out of 1.00

What is the result of the following code?

```
String str = "Hello";  
str.concat(", World!");  
System.out.println(str);
```

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

Question 15

Complete

Mark 0.00 out of 1.00

What is the result of the following code?

```
int x = 5;  
System.out.println(x++ + ++x);
```

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

Question 16

Complete

Mark 0.00 out of 1.00

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. 1
- ☐ b. 4
- ☐ c. 2
- ☐ d. 3

Question 17

Complete

Mark 0.00 out of 1.00

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

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

Question 18

Complete

Mark 1.00 out of 1.00

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

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

Question 19

Complete

Mark 1.00 out of 1.00

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

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

Question 20

Complete

Mark 1.00 out of 1.00

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

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