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Question 1

Not yet answered

Marked out of 1.00

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

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

Question 2

Not yet answered

Marked out of 1.00

How do you break out of a loop in Java?

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

Question 3

Not yet answered

Marked out of 1.00

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

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

Question 4

Not yet answered

Marked 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

Not yet answered

Marked 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. LinkedList
- ☐ b. TreeMap
- ☐ c. PriorityQueue
- ☐ d. HashMap

Question 6

Not yet answered

Marked out of 1.00

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

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

Question 7

Not yet answered

Marked 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. Doubly Linked List requires less memory
- ☐ c. Faster deletion
- ☐ d. Traversal in both directions is possible

Question 8

Not yet answered

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

Question 9

Not yet answered

Marked out of 1.00

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

- ☐ a. LinkedList uses nodes and pointers, while ArrayList uses an array
- ☐ 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. ArrayList stores objects, while LinkedList only stores primitive data types

Question 10

Not yet answered

Marked out of 1.00

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

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

Question 11

Not yet answered

Marked out of 1.00

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

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

Question 12

Not yet answered

Marked out of 1.00

What is the result of $5 / 2$ in Java?

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

Question 13

Not yet answered

Marked 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. 3
- ☐ b. 4
- ☐ c. 2
- ☐ d. 1

Question 14

Not yet answered

Marked out of 1.00

What is the result of the following code?

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

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

Question 15

Not yet answered

Marked out of 1.00

What is the result of the following code?

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

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

Question 16

Not yet answered

Marked 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. 2
- ☐ c. 4
- ☐ d. 3

Question 17

Not yet answered

Marked out of 1.00

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 18

Not yet answered

Marked out of 1.00

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

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

Question 19

Not yet answered

Marked out of 1.00

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

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

Question 20

Not yet answered

Marked 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. Pre-order
- ☐ c. Level-order
- ☐ d. In-order