

JAVA ARRAYS[] MCQ QUESTIONS 1

1. Which of the following declares an array of integers in Java?

- A) `int[] array;`
- B) `array[] int;`
- C) `int array[];`
- D) both a and c

2. What is the default value of an integer array element in Java?

- A) 0
- B) 1
- C) -1
- D) null

3. In Java, arrays are objects:

- A) True
- B) False
- C) Maybe
- D) Both a and b

4. Which of the following is the correct way to declare and initialize an array in Java?

- A) `int[] array = new int[5];`
- B) `int array = new int[5];`
- C) `int array[5];`
- D) None of the above.

5. What is the maximum index value of an array with 10 elements?

- A) 9
- B) 10
- C) 11
- D) 10.0

6. Which of the following methods returns the length of an array in Java?

- A) `length()`

- B) size()
- C) length
- D) size

7. Which keyword is used to access the elements of an array in Java?

- A) access
- B) get
- C) retrieve
- D) None of the above.

8. Arrays in Java can store:

- A) Only primitive data types
- B) Only objects
- C) Both primitive data types and objects
- D) None of the above.

9. What does the following code do?

```
int[] numbers = {1, 2, 3, 4, 5};
```

- A) Declares an array of integers and initializes it with values 1, 2, 3, 4, and 5.
- B) Declares an array of integers and initializes it with 5 elements.
- C) Declares a list of integers and initializes it with values 1, 2, 3, 4, and 5.
- D) None of the above.

10. What is the correct way to access the third **element of an array named `arr[]` in Java?**

- A) `arr[3]`
- B) `arr[2]`
- C) `arr(3)`
- D) `arr.third()`

11. What does the following code snippet do?

```
int[] numbers = {1, 2, 3, 4, 5};  
System.out.println(numbers[5]);
```

- A) Prints 5

- B) Prints 0
- C) Throws an `ArrayIndexOutOfBoundsException`
- D) Throws a `NullPointerException`

12. Which method is used to sort an array in Java?

- A) `sortArray()`
- B) `Arrays.sort()`
- C) `array.sort()`
- D) None of the above.

13. What is the output of the following code?

```
int[] arr = {3, 1, 2};  
Arrays.sort(arr); //sorts the array  
System.out.println(arr[0]);
```

- A) 1
- B) 2
- C) 3
- D) Compilation Error

14. Which of the following statements is true about array length in Java?

- A) Array length cannot be changed once initialized.
- B) Array length can be changed after initialization.
- C) Array length is automatically adjusted based on the number of elements added.
- D) None of the above.

15. How do you initialize an array in Java with a predefined set of values?

- A) By using the ``init`` keyword.
- B) By using the ``set`` keyword.
- C) By using the curly braces ``{}`` with comma-separated values.
- D) None of the above.

16. Which of the following statements is correct about the following code?

```
int[] arr = new int[3];
```

- A) It initializes an array of size 3 with default values.

- B) It declares an array of size 3 without initialization.
- C) It initializes an array of size 0 with default values.
- D) None of the above.

17. What does the `length` property of an array in Java return?

- A) The number of elements in the array.
- B) The size of the array.
- C) The capacity of the array.
- D) None of the above.

18. Which of the following is used to retrieve the last element of an array in Java?

- A) `arr[length - 1]`
- B) `arr[length]`
- C) `arr[last]`
- D) None of the above.

19. What is the time complexity of accessing an element in an array in Java?

- A) $O(1)$
- B) $O(\log n)$
- C) $O(n)$
- D) $O(n^2)$

20. What happens if you try to access an index that is out of bounds in Java?

- A) It returns 0.
- B) It returns null.
- C) It throws an `ArrayIndexOutOfBoundsException`.
- D) It throws a `NullPointerException`.