#### **Interview Questions on Arrays**

#### 1. What is an array in Java?

An array in Java is a data structure that allows you to store multiple values of the same data type in a single variable. Arrays provide a way to efficiently manage and access collections of elements.

#### 2. How do you declare an array in Java?

You can declare an array by specifying the data type, followed by square brackets [], and then the array variable name.

## 3. How do you initialize an array in Java?

Arrays can be initialized using the **new** keyword followed by the data type and the size of the array, or by providing initial values enclosed in curly braces {}.

# 4. How do you access elements of a one-dimensional array in Java?

Array elements are accessed using their index, starting from 0.

## 5. What happens if you try to access an index that is out of bounds?

Attempting to access an index that is out of bounds will result in an ArrayIndexOutOfBoundsException at runtime.

#### 6. How do you find the length of a one-dimensional array?

You can use the length property of the array to determine its length.

#### 7. How can you sort elements in a one-dimensional array in Java?

You can use the Arrays.sort() method to sort elements in a one-dimensional array in ascending order.

## 8. Can you change the size of an array after it is initialized?

No, the size of an array is fixed after it is initialized. You cannot change the size of an array dynamically in Java.

## 9. What is the default value of an element in an uninitialized array of integers?

The default value of an element in an uninitialized array of integers is 0.

#### 10. What is sorting? Why is it important in programming?

Sorting is the process of arranging elements in a specific order, such as ascending or descending. Sorting is important for organizing data, making it easier to search, analyze, and present.