Array Concept in Java

**Java array** is an object which contains elements of a similar data type. Additionally, The elements of an array are stored in a contiguous memory location. It is a data structure where we store similar elements. We can store only a fixed set of elements in a Java array.

Array in Java is index-based, the first element of the array is stored at the 0th index, 2nd element is stored on 1st index and so on.

Advantages

* **Code Optimization:** It makes the code optimized, we can retrieve or sort the data efficiently.
* **Random access:** We can get any data located at an index position.

Disadvantages

* **Size Limit:** We can store only the fixed size of elements in the array. It doesn't grow its size at runtime. To solve this problem, collection framework is used in Java which grows automatically.

## **Single Dimensional Array in Java**

**Syntax to Declare an Array in Java**

1. dataType[] arr; (or)
2. dataType []arr; (or)
3. dataType arr[];

**Instantiation of an Array in Java**

1. arrayRefVar=**new** datatype[size];