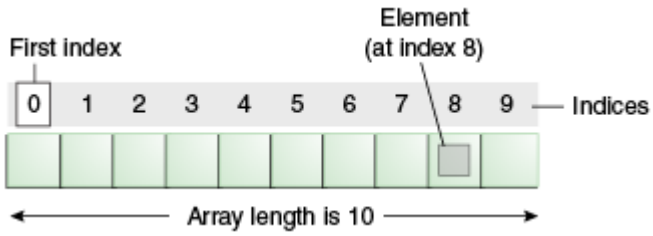
Arrays in Java

Q1-What do you mean by an Array?

Ans- An *array* is a container object that holds a fixed number of values of a single type. The length of an array is established when the array is created. After creation, its length is fixed.



Q2-How to create an Array?

Ans-To create an array, **define the data type (like int) and specify the name of the array followed by square brackets []**. To insert values to it, use a comma-separated list, inside curly braces: int myNumbers[] = {25, 50, 75, 100};

Example- One way to create an array is with the *new* operator.

```
// create an array of integers
int[] anArray = new int[10];
```

Q3-Can we change the size of an array at run time?

Ans- If you create an array by initializing its values directly, the size will be the number of elements in it. Thus the size of the array is determined at the time of its creation or, initialization once it is done **you cannot change the size of the array.**

Q4- Can you declare an array without assigning the size of an array?

Ans- Yes, We can declare an array without size but before using it needs to be initialized.

Q5- What is the default value of Array?

Ans- Doing this, java will assign the default value **0** to each element of the array in the case of an int array. Similarly, in the case of a boolean array, it will be false, **in the case of a String array the default value is null in java, and in the case of a char array, the default value is Unicode (\u0000)**.

Q6-What is 1D array with an example?

Ans- A One-Dimensional Array in Java programming is **a special type of variable that can store multiple values of only a single data type such as int, float, double, char, etc. at a contagious location in computer memory**.

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

Q7-Write a program on a 2D array?

Ans-2D array program-

```
        public class TwoDimArray{
   public static void main(String[] args)
   {
      // Array of size 4x3 to hold integers.
      int[][] values =
      {
         { 10, 20, 30 }, { 40, 50, 60 }, { 70,
80, 90 },
```

```
            { 11, 21, 31 }
        };

        // Nested loops to print the array in
tabular form.
        for (int row = 0; row < 4; row++)
        {
            for (int col = 0; col < 3; col++)
            {
                System.out.print(values[row][col] +
" ");
            }

            System.out.println();     // Print new
line.
        }
    }
}
```