

## Day 13 Assignment

1. What is the default value of Array for different data types?
2. Can you pass the negative number in Array size?
3. Where does Array stored in JVM memory?
4. What are the disadvantages of Array?
5. What is an Anonymous Array in Java? Give an example?
6. What are the different ways to traverse an Array in java?
7. What is the difference between length and length() method Give an Examples?

### 1. What is the default value of Array for different data types?

**Ans:**

in the case of an **int** array, it will be **0**.

in the case of a **boolean** array, it will be **false**.

in the case of a **String** array the default value is **null**.

In the case of a **char** array, the default value is **Unicode** (\u0000).

### 2. Can you pass the negative number in Array size?

**Ans:** no

### 3. Where does Array stored in JVM memory?

**Ans:** In Heap area

### 4. What are the disadvantages of Array?

**Ans:**

- Size is fixed
- Java cannot store heterogeneous data. It can only store a single type of primitives.

### 5. What is an Anonymous Array in Java? Give an example?

**Ans:**

- An array in Java without any name is known as an **anonymous array**.
- It is an array just for creating and using instantly.
- Using an anonymous array, we can pass an array with user values without the referenced variable.
- Properties of Anonymous Arrays:
  - We can create an array without a name. Such types of nameless arrays are called anonymous arrays.
  - The main purpose of an anonymous array is just for instant use (just for one-time usage).
  - An anonymous array is passed as an argument of a method.

Note: For Anonymous array creation, do not mention size in []. The number of values passing inside {} will become the size.

**Syntax:**

```
new <data type>[] {<list of values with comma separator>;}
```

**// Example of anonymous array**

```
class Test {
```

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```
public static void main(String[] args)
{
    // anonymous array
    sum(new int[]{ 1, 2, 3 });
}
public static void sum(int[] a)
{
    int total = 0;
    for (int i : a)
        total = total + i;
    System.out.println("The sum is: " + total);
}
}
```

## 6. What are the different ways to traverse an Array in java?

**Ans:** Two ways to traverse an array in java

1. Using for loop
2. Using for each loop.

**Using for loop** – Instead of printing element by element, you can iterate the index using for loop starting from 0 to length of the array (ArrayName.length) and access elements at each index.

**Using for each loop** – Since JDK 1.5, Java introduced a new for loop known as foreach loop or enhanced for loop, which enables you to traverse the complete array sequentially without using an index variable. You can traverse through the array with less effort using this.

## 7. What is the difference between length and length() method Give an Examples?

**Ans:** The key difference between Java's length variable and Java's length() method is that the Java length variable describes the size of an array, while Java's length() method tells you how many characters a text String contains.

**// Eg of length**

```
public class Main{
    public static void main(String[] args)
    {
        int nums[][]={
            {5,2,3,6},
            {8,3,6,4},
            {9,4,8,1}
        };
        System.out.println(nums[2].length);
    }
}
```

**// Eg of length ()**

```
public class Main{
    public static void main(String[] args)
    {
        String names="navin";
        System.out.println(names.length());
    }
}
```