02 Feb'23 Arrays in Java Assignment - 10

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

Ans: Since no values are passed during **initialization**, all elements of the array are set to their **default value** of **0**.

If we don't assign values to array elements and try to access them, the **compiler** does not produce an error as in the case of simple variables. Instead, it assigns values that aren't **garbage**.

Below are the default assigned values.

S. No. Datatype Default Value

- 1 boolean false
- **2** int 0
- 3 double 0.0
- 4 String null
- **5** User-Defined Type null

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

Ans: No, you cannot use a **negative integer** as **size**, the size of an array represents the number of **elements** in it, –ve number of elements in an array makes no sense

3. Where does Array stored in JVM memory?

Ans: Storage of Arrays:

As discussed, the **reference types** in Java are stored in **heap area**. Since **arrays** are **reference types** (we can create them using the **new** keyword) these are also stored in **heap area**.

4. What are the disadvantages of Array?

Ans: Once we create the size cannot be increased/ decreased. It stores only homogeneous data elements.

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

Ans: An **array** without a name is called **Anonymous Array**. This type of array is created just for instance use.

Example:

```
public class Demo{
public static void main(String... args){
add(new int []{10,20,30,40});
add(new int []{10,20});
add(new int []{});
}
public static void add(int [] a){
sum+=0;
for(int i=0;i<=a.length;i++){
sum+=a[i];
}
System.out.println("The sum is ::"+sum);
}
}</pre>
```

Output

The sum is 100 The sum is 30 The sum is 0

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

 Ans: You can traverse through an array using for loop or forEach loop.

 Using the for loop Instead of printing element by element, you can iterate the index using a for loop starting from 0 to length of the array (ArrayName. length) and access elements at each index.
- 7. What is the difference between length and length() method Give an Examples? Ans: length: It is a property of the Array type class. length(): It is a method of String class.

Example:

```
int[] a= {10,20,30};
System.out.println(a);// [l@...
System.out.println(a.length);//3
System.out.println(a.length());//CE::symbol not found
String'] names={"sachin","saurav","dhoni","yuvi"};
System.out.println(names); // [L@....
System.out.println(names [0]);//sachin
System.out.println(names.length);//4
System.out.println(names [0].length());6
int [] a [] ={{10,20,30},{100,200},{1000},{40,50,60,70}};
System.out.println(a);// [[l@...
System.out.println(a [0]);// [l@...
System.out.println(a.length);//4
System.out.println(a [0].length);3
```