**Arrays in Java : Assignment Solution**

1. What is the default values of an array for different datatypes?

| S. No. | Datatype | Default Value |
| --- | --- | --- |
| 1 | boolean | false |
| 2 | int | 0 |
| 3 | double | 0.0 |
| 4 | String | null |
| 5 | User-Defined Type | Null |
|  |  |  |

1. Can you pass the negative number in array size?

No, array size cannot be negative. If we specify array size as negative, there will be no compile time error. But there will be run time NegativeArraySizeException.

3.Where does array stored in JVM memory?

Memory is allocated in Heap area for the Array in Java virtual machine. In JVM reference types are stored in the Heap area. As arrays are also reference types, (they can be created using the “new” keyword) they are also stored in the Heap area.

4.What is the disadvantages of array?

1. Fixed in size :

Once you declare an array with a certain number of elements, you cannot add or remove elements.

1. Homogeneous types :

Arrays can only hold data of the same type. For example, if you declare an array to hold integers, you cannot store strings or characters in it. This limitation can make it difficult to work with data that has different types.

1. **Memory Allocation**

– Arrays require memory allocation at the time of declaration, which can be a disadvantage when working with large amounts of data. If you declare an array that is too big, it can waste memory space, and if you declare one that is too small, you may run out of space.

5.What is the anonymous array in Java? Give an example.

When we declare an array without any name then this type of array is called an anonymous array.

Using an anonymous array, we can pass an array with user values without the referenced variable.

Syntax: new data\_type[] { 1, 2, 3, 4};

Ex: new int[] {10,20,30};

Example:   
class Test {

    public static void main(String[] args)

    {

          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?

You can traverse through an array using

1.for loop or

2.for Each loop.

1. What Is the difference between length and length () ? Give an example.
2. The length variable is applicable to an array but not for string objects whereas the length() method is applicable for string objects but not for arrays.

**Example: length** can be used for int[], double[], String[]

to know the length of the arrays.

**length()** can be used for String, StringBuilder, etc

1. To directly access a field member of an array we can use **.length;** whereas **.length()** invokes a method to access a field member.