

Arrays in Java

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

When an array is created without assigning it any elements, compiler assigns them the default value. Following are the examples:

- Boolean - false
- int - 0
- double - 0.0
- Object - null

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

we 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?

The Java Virtual Machine has a heap that is shared among all Java Virtual Machine threads. The heap is the run-time data area from which memory for all class instances and arrays is allocated.

4. What are the disadvantages of Array?

- An array has a fixed size which means you cannot add/delete elements after creation. we also cannot resize them dynamically.
- We cannot store values of different data types in a single array.
- In the case of a large number of records, it may take more space than required for storing the same information.
- When inserting into an array, the insertion process requires moving each element from its original location to the next available slot. The shift cost increases linearly with the length of the array.
- Deleting an item from an array involves copying every preceding element to fill up the gap left behind by the deleted element. Deleting items from an array is very expensive because of this reason.
- Another disadvantage of arrays is that they don't support random access. If you want to get some particular record from an array, you must know its exact index.
- In the case of C language, the compiler does not execute index bound checking on arrays. So, if we try to access an element using an index that doesn't lie in the range of indexes of an array, the compiler displays a run time error, rather than showing an index out of bounds error.
- Arrays have limited functionality compared to other data structures. They are good only for simple tasks. For complex problems, better solutions should be found.

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

create an array without specifying any name such arrays are known as anonymous arrays.

Example: `new int[] { 1254, 5452, 5743, 9984};`

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

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

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

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.

```
public class Hello{  
    public static void main(String[] args)  
    {  
        int[] a= new int[10];  
        System.out.println("Size of an array a is "+ a.length);  
        String Str= "Hello World";  
        System.out.println("Size of the String is "+ Str.length());  
    }  
}
```