Arrays In Java

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

Doing this, java will assign the default value 0 to each element of the array in the case of an int array

.

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

In general, arrays are the containers that store multiple variables of the same datatype. These are of fixed size and the size is determined at the time of creation. Each element in an array is positioned by a number starting from 0.

3.Where does array stored in JVM memory?

The reference types in Java are stored in heap areas. Since arrays are reference types (we can create them using the new keyword) these are also stored in heap areas.

4.What are the disadvantages of Array?

Fixed size: Once you create an array using the Array class, its size is fixed and cannot be changed. This means that you cannot easily add or remove elements from the array. You would need to create a new array with the desired size and copy the elements from the old array to the new one, which can be inefficient and time-consuming.

Limited functionality: The Array class provides only basic functionality for manipulating arrays. If you need more advanced features, such as dynamic resizing or complex sorting algorithms, you may need to use a different data structure or write your own custom code.

Difficulty with multi-dimensional arrays: The Array class can be difficult to use with multi-dimensional arrays. You need to create an array of arrays, which can be confusing and error-prone.

No built-in methods: The Array class does not provide any built-in methods for sorting, searching, or manipulating arrays. You would need to write your own code or use external libraries to perform these operations.

5.What is an anonymous in java? Give an example?

An array without a name is called an anonymous array?
Anonymous classes enable you to make your code more concise. They enable you to declare and instantiate a class at the same time. They are like local classes except that they do not have a name. Use them if you need to use a local class only once.

```
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);
        }
}
```

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?

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.

```
public class IteratingArray {

   public static void main(String args[]) {

      //Creating an array

      int myArray[] = new int[7];

       //Populating the array

       myArray[0] = 1254;

       myArray[1] = 1458;

       myArray[2] = 5687;

       myArray[3] = 1457;

       myArray[4] = 4554;

       myArray[5] = 5445;

       myArray[6] = 7524;

       //Printing Contents using for loop

       System.out.println("Contents of the array: ");

       for(int i=0; i<myArray.length; i++) {

          System.out.println(myArray[i]);

       }

   }
```

Output

Contents of the array:
1254
1458
5687
1457
4554
5445
7524

7.What is the difference between length and length() method? give an example?

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.

Differences between Java length and length()

The Java length property is used with the String class
The Java length method is used with the array class
The Java length property returns the size of an array
The Java length method returns the number of characters in a text String
The Java length method must have round brackets at the end
The Java length property throws a compile error if you add round brackets
The Java length method is a good example of data encapsulation
The Java length property has its roots in C and C++ programming

A length() example for Java Strings

Here is a simple example of using the Java length() method to get the number of characters in a String:

```
String simpleString = "Length example";
int listSize = simpleString.length();
```

A length example for Java arrays

Here is an example of using the Java length method to get the number of elements in an array:

```
int[] simpleArray = {1,2,3,4,5};
int simpleArraySize = simpleArray.length;
```