1.What do you mean by an Array?

Ans.Array in java is a group of like-typed variables referred to by a common name.

An array is a collection of similar data elements stored at contiguous memory locations. It is the simplest data structure where each data element can be accessed directly by only using its index number.

2. How to create an Array?

Ans. There are two ways you can declare and initialize an array in Java.

- dataType [] nameOfArray = new dataType [size]
  - The first is with the new keyword, where you have to initialize the values one by one.
- dataType [ ] nameOfArray = {value1, value2, value3, value4}
  - The second is by putting the values in curly braces.

3. Can we change the size of an array at run time?

Ans. No

4. Can you declare an array without assigning the size of an array?

Ans. Yes. We can declare an array without size but before using it needs to be initialized.

5. What is the default value of Array?

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).

6. What is an 1D array with an example?

Ans. A one-dimensional array in Java is a collection of similar types of elements stored at contiguous memory locations.

Syntax of 1D array

data-type var-name[];

or

data-type[] var-name;

or

data-type []var-name;

7. Write a program on a 2D array?

Ans.

```
import java.util.Arrays;
public class Main
{
    public static void main(String args[])
    {
    int[][] StudentMarks = new int[3][3];
    // Marks Attained By Student 1
        StudentMarks[0][0] = 90; // English
        StudentMarks[0][1] = 70; // Maths
        StudentMarks[0][2] = 84; // Science
        // Marks Attained By Student 2
        StudentMarks[1][0] = 75; // English
        StudentMarks[1][1] = 77; // Maths
        StudentMarks[1][2] = 89; // Science
        // Displaying Marks of Students
    System.out.println("Student Marks Matrix");
```

```
    System.out.println(Arrays.deepToString(StudentMar
ks));
    }
}
```