1. What do you mean by an array?
Ans: Array is a data structure that holds multiple, similar(homogenous) data in a sequential format but a fixed number of such data. It refers to the index collection of a fixed number of homogeneous data elements—a single variable holds multiple values which improves the program's readability.

2. How to create an array?
Ans:
A Single Dimension(1D) Array can be declared as:
int[] a; int []a; int a[];
Example:

```
int a[];
a=new int[5];
     or
int a[] =new int[5];
```

A Two Dimensional(2D) Array can be declared as:

```
int[][] a ;
int  a[][];
int  [][]a;
int[] []a;
int[] a[];
int []a[]; // All declarations are valid
```

Example:

```
int[][] a =new int[3][2];
          or
int[][] a= new int[3][];
a[0]=new int[5];
a[1]=new int[3];
a[2]=new int[1];
```

3. Can we change the size of an array at run time?
Ans: If we create an array by initializing its values directly, the size will be the number of elements in it. Thus the size of the array is determined at the time of its creation or, initialization once it is done we cannot change the size of the array. So the size of an array cannot be changed at run time.

4. Can you declare an array without assigning the size of an array?
Ans: Yes, we can declare an array without assigning its size during declaration itself. But before using it, it must be initialized(before compilation).

Example:

```
int a[];       // We just declared the array with a variable name here
a=new int[5]; // Here we initialized its size.
```

5. What is the default value of array?
Ans: Default of an array depends on the type of data stored in it. Different array types and the default value they'll store is mentioned below:

Array Type(Which type of data it holds)	Default Value
int, byte, short	0
String	null
boolean	False
float	0.0f
double	0.0d
char	'\u0000'

6. What is a 1D array with an example?
Ans: A 1D or Single Dimensional Array is an array with one row but multiple(2 or more) columns. A 1D Array holds multiple homogeneous data in one row.
Example:
int a[] = new int[5];
Here, a is an array which holds 5 integer elements in one row. Since we have not set any values to the array, default values(for integer 0) are stored in the array as array elements.

a

0	0	0	0	0

7. Write a program on a 2D array?
Ans:
The following is a program to set the values and print them for a 2D Array.

```java
import java.util.*;


public class Program {
    public static void main(String[] args) {
        int arr[][] = new int[4][4];
        for(int i=0;i<4;++i){
        for(int j=0;j<4;j++){
            arr[i][j] = 2*(i+j);

        }

        }
        for(int i=0;i<4;++i){
            for(int j=0;j<4;j++){
                System.out.print(arr[i][j] + " ");
            }
            System.out.println();

        }

    }
}
```