

Multidimensional Array by Munawar

Multidimensional Array

Multidimensional arrays are array of Arrays each element of a M-D array is an array itself marks in the previous example was a 1D array.

Multidimensional 2-D Array

A 2-D array can be created as follows:

```
Int [ ] [ ] flats= new Int [2] [3]
```

```
lats=new int [2][3]; //2 rows 3 column
// 2 floors 3 home
flats[0][0]=50;
flats[0][1]=100;
flats[0][2]=200;

flats[1][0]=1000;
flats[1][1]=2000;
flats[1][2]=3000;
```

This 2-D array can be visualized as follows:

	[0]	[1]	[2]
	Col 1	col 2	col 3
[0]	Row 1 (0,0)	(0,1)	(0,2)
[1]	(1,0)	(1,1)	(1,2)

Similarly A 3-D array can be created as follows:

```
String [ ] [ ] [ ] array= new String [2] [3] [3]
```

Source Code

```
import java.util.Scanner;
public class Main {
    public static void main(String[] args) {
        // Multidimensional array
        int [] marks; // A 1-D array
        int [][] flats; // A 2-D Array
```

```
flats=new int [2][3]; //2 rows 3 column
// 2 floors 3 home
flats[0][0]=50;
flats[0][1]=100;
flats[0][2]=200;

flats[1][0]=1000;
flats[1][1]=2000;
flats[1][2]=3000;

//Displaying array using array
System.out.println("Printing the 2-D array using for loop");

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

}
```

Thank You