

## → Data Structures

## # Arrays.

→ By default, array is zero value aa jati hai

Syntax: `int[] array_name = new int[n];``int[] = array array_name;``array_name = new int[n];``int marks[] = new int[5];`eg. `int rollNos[], classes;`store ↓  
variable that array↓  
normal variable`int[] rollNos, classes;`

arrays

/\* write a program to take input from a teacher about marks of student \*/

`import java.util.Scanner;``public class AvgOfMarks {String[] args;}``public static void main(String[] args){`~~ser~~



```
Scanner sc = new Scanner(System.in);  
System.out.println("Enter the no.  
of student");  
int n = sc.nextInt();
```

```
System.out.println("Enter the  
marks");
```

```
int marks = sc.nextInt();
```

```
int marks[] = new int[n];
```

```
for (i=0 for (int i=0; i<n; i++)  
{
```

```
int marks[i] = sc.nextInt();
```

```
}
```

```
int avgMarks = 0;
```

```
for (int i=0; i<n; i++)
```

```
{
```

```
avgMarks += marks[i];
```

```
}
```

```
avgMarks /= n;
```

```
System.out.println("Avg. Marks  
of student" + avgMarks);
```

```
}
```



## 2D-Array:

Syntax.  $\rightarrow$  `int a[][] = new int[4][3];`

$\downarrow$

4	9	2
3	5	7
8	1	6

	col1	col2	col3
row0	a[0][0]	a[0][1]	a[0][2]
row1	a[1][0]	a[1][1]	a[1][2]
row2	a[2][0]	a[2][1]	a[2][2]

## Initialisation.

```
int b[][] = { {3, 1, 5, 7, 2},  
             {4, 1, 7},  
             {1, 2, 3, 5, 6, 8}  
            };
```