

# Contents

## Arrays

### Arrays

Arrays are used to group elements of either of primitive or reference (non-primitive) types.

- All elements of array are of SAME TYPE.
- Array is FIXED-LENGTH data structure having ZERO - based indexing.



### Array Declaration & Initialization

Declaration	<pre>int arr1[]; arr1 = new int[4];</pre>
Short form of above Declaration	<pre>int arr1[] = new int[4];      (or)   int[] arr1 = new int[4];</pre>
Declaration with Initialization	<pre>int arr1[] = {2,3,4,5};</pre>
Initialization in case of Declaration 1,2	<pre>arr1[0]=2;   arr1[1]=3;   arr1[2]=4;   arr1[3]=5;</pre>
Declaring Array Object	<pre>Student stu = new Student[3]; // creates 3 objects of Student class</pre>
2D Array Declaration	<pre>int arr1[][] = { {2,3},{4,5},{34,56}}; int arr1[][] = new int[3][2];</pre>

## Foreach loop

```
//Syntax
for (variable : collection)
```

```
//Example
for (int val : arr1)
{ System.out.println (val); }
```

## Varargs (Variable Argument List) or ellipsis (...)

```
//Valid Code
void print(int a,int b,String...c)
{    //code    }
```

```
//Invalid Code
void print(int a, int b...,float c)
{    //code    }
```

**Rule :** Varargs can be used only in the final argument position.

## Methods in java.util.Arrays class

Method Name	Use
asList	Creates a new List from array
binarySearch	searches an element in an array
copyOf(array,n)	Creates new array of n size and copy all elements from array to new one
copyOfRange(array,n,from,to)	Creates new array of n size and copy specified elements from array to new one
Sort	Sort elements in array
Equals	Compare two array elements
Fill	Inserts specified value to each element of an array