**Array**

Array is a group of related item.

Array is used to store group of elements in a similar type and we can access the element by using the index no.

a[][][]

**creating an Array**

**first step :**

**we have to declare an array.**

**Eg : int arr[]; // declaration part**

arr is a array variable contains a value null, does not yet point to any actual or physical array.



null

arr



**second step :**



we have to create an array.

By using new operator we create a memory for the array.



**Eg : arr=new int[3];**



0 0 0



// instantiation part

**Third step :**

We have to initialize an array

// initialization part

arr[1]=10;

System.out.println(arr[1]);

**Example :**

**public class ArrayDemo {**

**public static void main(String[] args) {**

**// TODO Auto-generated method stub**

**int arr[]=new int[3];**

**arr[1]=10;**

**arr[0]=5;**

**System.*out*.println(arr[1]);**

**System.*out*.println(arr[2]);**

**System.*out*.println(arr[0]);**

**}**

**}**

**Array Initializer :**

int a[]={44,33,55,52,11}

* Dynamic memory allocation

Elements are separated by comma and surrounded by curly braces

No need to use the new operator, while declaring array itself we can initialize the elements.

**Example :**

**public class ArrayDemo1 {**

**public static void main(String[] args) {**

**// TODO Auto-generated method stub**

**int a[]={44,33,55,52,11};**

**System.*out*.println(a.length);**

**System.*out*.println();**

**for(int i=0;i<a.length;i++) {**

**System.*out*.println(a[i]);**

**}**

**// for each**

**for(int i : a) {**

**System.*out*.println("value : "+i);**

**}**

**}**

**}**

**Multi dimensional array :**

Array of Array,

If we add the another square bracket, then it is a multi dimension array.

arr[][][]

two Dimension array :

int brr[][]=new int[2][3]; // 2 rows and 3 columns

2X3 matrix

**Example :**

**public class ArrayTwoDimen {**

**public static void main(String[] args) {**

**// TODO Auto-generated method stub**

**int brr[][]=new int[2][3];**

**int k=1;**

**for(int i=0;i<2;i++) {**

**for(int j=0;j<3;j++) {**

**brr[i][j]=k++;**

**System.*out*.print(brr[i][j]+" ");**

**}**

**System.*out*.println();**

**}**

**}**

**}**