**Array**

* Homogeneous
* Fixed
* Object 🡪 Contiguous locations

**Declaration**

Not use memory

Int [] arr;//1-D

Int [] [] arr;//2-D

Int [] [] [] arr;//3-D

**Use of memory**

arrr= new int [10];

arr1= new int [2] [2];

arr2=new int [2] [2] [2];

**array variable assignment**

1. Int arr[] ={10, 20, 30};

Char ch[]={‘a’,’b’,’c’};

Int arr2[]=[40,50};

arr[] = ch[]; //Compile time error

arr[] = arr2[];

1. int arr[]={10, 20, 30};

int arr2[]={40,50,60,70,80};

arr[] = arr2[];

arr[] = arr[];

Case 1:

1. Element level premotion are not applicable in array level.
2. Char element can be promoted int type but char array cannot promote int array.

Note: - In case of object type array child type array can be promoted.

object arr[]=new object[10];

arr[0] = new String (“Ravi”);

String[] s= {“Ram”, “Raj”, Sond”);

arr[]=s;

Case 2:

Whenever we assigning one array to another array internal elements want be copied only reference to the element will be reassigned.

**drawing**

Case 3:

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

arr[0]=new int [3][4];

arr[1]= new int [3];

int arr1[] = {10,20};

arr[2] =arr1;

* When ever we assigning one array to another array dimension must be matched. Then we will be getting compile time error.

**drawing**

int arr[][] =new int[3][2];

arr[0] =new int[4];

arr[1] =new int[3];

arr =new int [4][3];

1. How may objects are created?
2. How may objects are eligible for garbage collection.