

Arrays

1. Array allocates continues memory locations of same datatype that share a common name
2. The individual values in the array are called as elements.
3. Each array element is referred by specifying the array name, followed by a number within the square braces[],referred as an index or subscript.
4. A subscript always enclosed in square braces []

Type of Arrays

1. Single dimension Array
2. Double or Two Dimension Array
3. Multi Dmension Array

Declaration of Single Dimension Array

Syntax:

```
datatype array_name[size];
```

Example:

```
int a[10];  
float f[20];  
char ch[30];
```

Note:

- Array size should be a Non-Negative integer
- Array location will always starting from zero ie: a[0] or f[0] or c[0];

Array initialization

```
int a[]={23,34,44,11,12,45,27};
```

Each element in the array is accessed with the help of subscripts.

Two Dimension Array

1. Arrays hose elements are specified by two subscripts are referred as two-dimension array.
2. It requires two pair of square brackets for two subscripts.

Syntax:

```
Datatype arrayname[rowsize][colsize];
```

Eg:

```
int a[3][3];
```

Array initialization

```
int a[3][3] = { {2,3,5},  
                {5,6,7},  
                {2,5,8}};
```