**Array**

Definition :-

Array is a group of related data items that share a Common Name.

Array is considered as Derived datatype in C, C++.

Syntax :-

Declaration :

Datatype <Array\_Name>[Size];

Initialization :

Datatype <Array\_Name>[Size] = {<Comma\_Separated\_Values>};

Example :-

int Fun[10] = { 50,55,65,75 } ;

Fun

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 50 | 55 | 65 | 96 | 0 | 0 | 0 | 0 | 0 | 0 |

0 1 2 3 4 5 6 7 8 9

Fun[3] = 96;

Accessing of Array Elements -- **Display**, Further Processing

Assigning Values to array index hole **Insert**

**Update**

**Search**

**Counting**

**Sort**

**Two Dimensional**

Datatype ArrayName[Row\_Size][Col\_Size];

int TdNum[4][7] = {

{2,55,75,82} ,

{12,55,75,8,46 } ,

{0} ,

{52,85,75,8,58,9,4}

};

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2 | 55 | 75 | 82 | 0 | 0 | 0 |
| 12 | 55 | 75 | 8 | 46 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 52 | 85 | 75 | 8 | 58 | 9 | 4 |

Pp

printf(“%d”,TdNum[1][4] ); //46;

Array

Definition :

Collection of Homogenous / Similar data type elements that shares common share

Continuous Blocks of Memory required

Declaration

Syntax

Exa

Initialization

Syntax

Exa

Types

1. 1D Array
2. 2D Array (Matrix)
3. Multi-Dimensional Array