#### Simple Array

Let us try to write a program to find average marks obtained by a  
class of 30 students in a test.

#include<stdio.h>

main()

{

int avg, i, sum=0;

int marks[30] ; /\*array declaration \*/

for ( i = 0 ; i <= 29 ; i++ )

{

printf ( "\nEnter marks " ) ;

scanf ( "%d", &marks[i] ) ; /\* store data in array \*/

}

for ( i = 0 ; i <= 29 ; i++ )

sum = sum + marks[i] ; /\* read data from an array\*/

avg = sum / 30 ;

printf ( "\nAverage marks = %d", avg ) ;

}

#### Two-Dimensional Array

#include <stdio.h>

main () {

/\* an array with 5 rows and 2 columns\*/

int a[5][2] = { {0,0}, {1,2}, {2,4}, {3,6},{4,8}};

int i, j;

/\* output each array element's value \*/

for ( i = 0; i < 5; i++ ) {

for ( j = 0; j < 2; j++ ) {

printf("a[%d][%d] = %d\n", i,j, a[i][j] );

}

}

return 0;

}

### Example of Array In C programming to find out the average of 4 integers

#include <stdio.h>

int main()

{

int avg = 0;

int sum =0;

int x=0;

/\* Array- declaration – length 4\*/

int num[4];

/\* We are using a for loop to traverse through the array

\* while storing the entered values in the array

\*/

for (x=0; x<4;x++)

{

printf("Enter number %d \n", (x+1));

scanf("%d", &num[x]);

}

for (x=0; x<4;x++)

{

sum = sum+num[x];

}

avg = sum/4;

printf("Average of entered number is: %d", avg);

return 0;

}