/\* Program to search an element of an array using **Linear search** **method** \*/

#include<iostream.h>

#include<conio.h>

void main()

{ clrscr();

int A[50]; int n; int p; int subscript; /\*Note: subscript and index are same.\*/

cout<<"Enter the array size : ";

cin>>n; // n=size upto which user wants to insert values in array

cout<<"\n\nEnter elements of array : \n";

for(int i=0; i<n; i++)

cin>>A[i];

cout<<"\n\nThe array formed = ";

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

cout<<A[i]<<" ";

cout<<"\n\nEnter the element to be searched : ";

cin>>p; // p=element to be searched

void linear\_search ( int A[], int n, int p); //function declaration

linear\_search(A,n,p);

getch();

}

void linear\_search(int A[], int n, int p)

{ int count=0; int B[50]; int flag=0;

for(int i=0; i<n; i++)

{ flag=count;

if( A[i]==p)

{

B[count]=i;

count++;

flag=count;

}

}

if(flag==0)

cout<<"\n\nRequested element not found.";

else

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

{ if(A[i]==p)

{

cout<<"\n\nElement "<<p<<" is found";

cout<<"\n\nSubscript = "<<i<<"\n\nPosition = "<<i+1<<"\n\n\n";

}

}

}

**Output:**

Enter the array size : 5

Enter elements of array :

7

9

23

24

12

The array formed = 7 9 23 24 12

Enter the element to be searched : 24

Element 24 is found

Subscript = 3

Position = 4