

# **PROGRAM 1:**

## **WRITE A PROGRAM TO PERFORM LINEAR SEARCH**

```
#include<stdio.h>

int main()
{int i,n,f=0;
    int arr[5]={1,2,3,4,5};
    printf("enter a number\n");
    scanf("%d",&n);
    for(i=0;i<5;i++)
    {
        if(i==n){
            printf("the given number is %d and it is present in the array",n);
            f=1;
        }
    }
    if(f==0)
    {
        printf("the number is not in the array\n");
    }
    return 0;

}
```

## OUTPUT:

### CASE 1: WHEN THE ELEMENT IS PRESENT IN THE ARRAY

```
C:\Users\Pearl\Desktop\dsaCollege>gcc linearSearch.c  
C:\Users\Pearl\Desktop\dsaCollege>a.exe  
enter a number  
1  
the given number is 1 and it is present in the array
```

### CASE 2: WHEN THE ELEMENT IS NOT PRESENT IN THE ARRAY

```
C:\Users\Pearl\Desktop\dsaCollege>a.exe  
enter a number  
9  
the number is not in the array
```