

## SOURCE CODE

```
#include<iostream>
using namespace std;
int recursive_linearSearch(int *a,int n,int idx,int item){
    if(idx>=n){
        return 0;
    }
    if(a[idx]==item){
        return idx+1;
    }
    recursive_linearSearch(a,n,idx+1,item);
}
int main(){
    int *a,n,x;
    cout<<"enter the size: ";
    cin>>n;
    a=new int[n];
    cout<<"enter the element"<<endl;
    for(int i=0;i<n;i++){
        cin>>a[i];
    }
    cout<<"Enter the element you want to find"<<endl;
    cin>>x;
    int ans= recursive_linearSearch(a,n,0,x);
    if(ans==0){
        cout<<"element not find"<<endl;
    }
    else{
        cout<<"The element "<<x<<" is find at pos: "<<ans<<endl;
    }
}
```

## OUTPUT

```
enter the size: 6
enter the element
3
4
2
1
6
5
Enter the element you want to find
6
The element 6 is find at pos: 5
PS C:\Users\anil kumar\Documents\anil\.vscode\DataStructure_in_nsut>
PS C:\Users\anil kumar\Documents\anil\.vscode\DataStructure_in_nsut> cd "c:\Users\anil kumar\Documents\anil\.vscode\DataStructure_in_nsut" ; if ($?) { g++ -std=c++17 11_recursive_linearSearch.cpp -o 11_recursive_linearSearch } ; if ($?) {
enter the size: 5
enter the element
11 44 23 64 65
Enter the element you want to find
65
The element 65 is find at pos: 5
PS C:\Users\anil kumar\Documents\anil\.vscode\DataStructure_in_nsut> cd "c:\Users\anil kumar\Documents\anil\.vscode\DataStructure_in_nsut" ; if ($?) { g++ -std=c++17 11_recursive_linearSearch.cpp -o 11_recursive_linearSearch } ; if ($?) {
enter the size: 7
enter the element
23
54
65
87
12
43
56
Enter the element you want to find
12
The element 12 is find at pos: 5
PS C:\Users\anil kumar\Documents\anil\.vscode\DataStructure_in_nsut>
```