S.No: 1	Exp. Name: ***Program for Recursive Linear search***	Date:

Aim:

Program for Recursive liner research

Source Code:

linearSearch.c

```
#include<stdio.h>
int RecursionveLS(int arr[], int value, int index, int n)
{  int pos;
if(index>=n){
   return 0;
   }
   else if(arr[index]==value)
   {
      pos = index + 1;
      return pos;
      }
      else{
         return RecursionveLS(arr,value,index+1,n);
         }
         return pos;
         }
         int main()
         {
            int n, value, pos,m=0,arr[100];
            printf("enter the no of elements: ");
            scanf("%d",&n);
            printf("Enter %d integer(s)\n",n);
            for(int i=0; i<n; i++)
            {
               scanf("%d",&arr[i]);
               }
               printf("enter the item to be search: ");
               scanf("%d",&value);
               pos = RecursionveLS(arr, value , 0,n);
               if(pos != 0)
               {
                  printf("item location = %d  item = %d",pos,value);
                  }
                  else{
                     printf("no item found");
                     }
                     return 0;

         }
```

Execution Results - All test cases have succeeded!

Test Case - 1	
User Output	
enter the no of elements: 5	
Enter 5 integer(s) 1	
2	2
3	3
6	6

Test Case - 1	
5	5
enter the item to be search: 5	
item location = 5 item = 5	

Test Case - 2	
User Output	
enter the no of elements: 3	
Enter 3 integer(s) 22	
33	33
9	9
enter the item to be search: 0	
no item found	

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