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//Created By Ritwik Chandra Pandey
//On 7th Nov 2021
//Linear Search using Recursion
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/*
 * Approach : The idea is to compare x with the last element in arr[].
 * If an element is found at the last position, return it.
 * Else recur elmntSrch() for remaining array and element x.
 */
```

```
#include <stdio.h>
```

```
// Recursive function to search x in arr[]
int elmntSrch(int arr[], int size, int x) {
    int rec;
```

```
    size--;
```

```
    if (size >= 0) {
        if (arr[size] == x)
            return size;
        else
            rec = elmntSrch(arr, size, x);
    }
    else
        return -1;
```

```
    return rec;
}
```

```
void read(int a[],int n){
    printf("Enter %d elements : ",n);
    for(int i=0;i<n;i++)
        scanf("%d",&a[i]);
}
```

```
int main(void) {
    int arr[20],size,key,indx;
```

```
printf("Enter size of the array");
scanf("%d",&size);
read(arr,size);
printf("Enter key element: ");
scanf("%d",&key);
indx = elmntSrch(arr, size, key);

if (indx != -1) printf("Element %d is present at index %d", key, indx);
else printf("Element %d is not present", key);
return 0;
}
```