

5/12/23

classmate

Date

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C Program

linear Search

Selection sort

bubble sort

Bubble sort -

#include <stdio.h>

void main()

{

int i, j, n, p;

int ls[] = {4, 5, 6, 3};

for(i=0; i<4; i++)

{

for(j=0; j<3; j++)

{

if(ls[j] > ls[j+1])

p = ls[j];

ls[j] = ls[j+1];

ls[j+1] = p;

}

printf("Sorted elements of the array are ");

for(i=0; i<4; i++)

{

printf("%d ", ls[i]);

}

Output - Sorted element of the array are 3 4 5 6

Selection sort

```
#include <stdio.h>
void main()
{
    int a[100], n, i, j;
    printf("Enter number of elements");
    scanf("%d", &n);
    printf("Enter %d numbers", n);
    for(i=0; i<n; i++)
        scanf("%d", &a[i]);
    for(i=0; i<n-1; i++)
    {
        position = i;
        for(j=i+1; j<n; j++)
        {
            if(a[position] > a[j])
                position = j;
        }
        if(position != i)
        {
            swap = a[i];
            a[i] = a[position];
            a[position] = swap;
        }
    }
    printf("Sorted Array is\n");
    for(i=0; i<n; i++)
        printf("%d ", a[i]);
}
```

Let Let :- Enter no. of elements

enter 4

3

1

8

4

struct array

1

3

4

8