

Selection Sort:

```
#include <iostream>
using namespace std;

void sort(int a[], int n)
{
    int min_index, i, j;

    for (i = 0; i < n - 1; i++)
    {
        min_index = i;           //assume first element to be minimum and sorted
        for (j = i + 1; j < n; j++) //compare ith element with other element
        {
            if (a[j] < a[min_index])
                min_index = j;
        }
        int temp = a[i]; //now till ith index array is sorted
        a[i] = a[min_index];
        a[min_index] = temp;
    }
}

int main()
{
    int n, a[20];
    cout << "Enter number of elements: ";
    cin >> n;
    cout << "Enter the elements: ";
    for (int j = 0; j < n; j++)
        cin >> a[j];
    sort(a, n);
    cout << "After sorting :";
    for (int j = 0; j < n; j++)
        cout << a[j] << " ";
}
```

OUTPUT:

```
User@PRATHIKSHA /c/ada lab
$ cd "/c/ada lab/" && g++ selectionsort.cpp -o selectionsort && "/c/ada lab/"selectionsort
Enter number of elements: 7
Enter the elements: 10 0 -5 9 2 1 0
After sorting :-5 0 0 1 2 9 10
```