

## Selection Sort

```
#include <iostream>

using namespace std;

void print(int[],int&);

void selection_sort(int[],int&);

void input (int[],int&);

int main(){

    int s;

    cout << "Enter the Size of Array : ";cin>>s;

    int arr[s];

    input(arr,s);

    print(arr,s);

    selection_sort(arr,s);

    print(arr,s);

    return 0;

}

void input(int arr[],int &s){

    for(int i=0;i<s;i++){

        cout << "Enter "<<i<<"
Index Value : ";cin>>arr[i];

    }

}
```

```
void print(int arr[],int&s){

    cout<<"Array is !" <<endl;

    for(int i=0;i<s;i++){

        cout << arr[i]<<" ";

    }

    cout << endl;

}

void selection_sort(int arr[],int& s){

    int min=0,temp;

    for(int j=0;j<s-1;j++){

        min=j;

        for( int i=0+j;i<s-1;i++){

            if(arr[min]>arr[i+1])

            {

                min=i+1;

            }

        }

        temp=arr[min];

        arr[min]=arr[j];

        arr[j]=temp;

    }

}
```

```

C:\Users\Naeem ur Rahman\OneDrive\Desktop\...
Enter the Size of Array : 6
Enter 0 Index Value : 80
Enter 1 Index Value : 70
Enter 2 Index Value : 60
Enter 3 Index Value : 55
Enter 4 Index Value : 10
Enter 5 Index Value : 90
Array is !
80 70 60 55 10 90
Array is !
10 55 60 70 80 90
-----
Process exited after 23.92 seconds with return value 0
Press any key to continue . . .

```

## Insertion Sort

```

#include <iostream>

using namespace std;

void print(int[],int&);

void insertion_sort(int[],int&);

void input (int[],int&);

int main(){

    int s;

    cout << "Enter the Size of Array : ";
    cin>>s;

    int arr[s];

    input(arr,s);

    print(arr,s);

    insertion_sort(arr,s);

    print(arr,s);

    return 0;

}

```

```

void input(int arr[],int &s){
    for(int i=0;i<s;i++){

        cout << "Enter "<<i<<"
Index Value : ";
        cin>>arr[i];

    }

}

void print(int arr[],int&s){

    cout<<"Array is !" <<endl;

    for(int i=0;i<s;i++){

        cout << arr[i]<<" ";

    }

    cout << endl; }

void insertion_sort(int arr[],int& s){

    int key,t;

    for(int i=1;i<s;i++){

        key=arr[i];

        t=i-1;

        while(arr[t] > key && t >= 0

    ){

        arr[t+1]=arr[t];

        t--;

    }

    arr[t+1]=key;

}
}

```

```

C:\Users\Naeem ur Rahman\OneDrive\Desкто...
Enter the Size of Array : 6
Enter 0 Index Value : 80
Enter 1 Index Value : 70
Enter 2 Index Value : 60
Enter 3 Index Value : 55
Enter 4 Index Value : 10
Enter 5 Index Value : 90
Array is !
80 70 60 55 10 90
Array is !
10 55 60 70 80 90

-----
Process exited after 12.11 seconds with return value 0
Press any key to continue . . .

```