

### Practical 3:

#### # Selection Sort Ascending order

```
def selectionSort(array, size):  
  
    for ind in range(size):  
        min_index = ind  
  
        for j in range(ind + 1, size):  
            # select the minimum element in every iteration  
            if array[j] < array[min_index]:  
                min_index = j  
        # swapping the elements to sort the array  
        (array[ind], array[min_index]) = (array[min_index], array[ind])  
  
arr = [12,57,-5,5,69,-1]  
size = len(arr)  
selectionSort(arr, size)  
print("The array after sorting in Ascending Order by selection sort is:")  
print(arr)
```

#### Output:

```
(base) ubuntu@ubuntu-OptiPlex-3090:~$ python Selsort.py  
The array after sorting in Ascending Order by selection sort is:  
[-5, -1, 5, 12, 57, 69]
```

#### # Selection Sort Descending order

```
def selectionSort(array, size):  
  
    for ind in range(size):  
        min_index = ind  
  
        for j in range(ind + 1, size):  
            # select the minimum element in every iteration  
            if array[j] > array[min_index]:  
                min_index = j  
        # swapping the elements to sort the array  
        (array[ind], array[min_index]) = (array[min_index], array[ind])  
  
arr = [12,57,-5,5,69,-1]  
size = len(arr)  
selectionSort(arr, size)  
print("The array after sorting in Descending Order by selection sort is:")  
print(arr)
```

#### Output:

```
(base) ubuntu@ubuntu-OptiPlex-3090:~$ python seldesc.py  
The array after sorting in Descending Order by selection sort is:  
[69, 57, 12, 5, -1, -5]
```