

Name:-

Roll No.:-

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Title:- Implement Greedy search algorithm for selection sort

Program :-

Greedy search Algorithm for selection sort program

```
# Selection sort in Python
# time complexity O(n*n)
# sorting by finding min_index
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 = [-2, 45, 0, 11, -9, 88, -97, -202, 747]
size = len(arr)
selectionSort(arr, size)
print('The array after sorting in Ascending Order by selection sort is:')

print(arr)
```

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jupyter

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In [1]:

```
# Selection sort in Python
# time complexity O(n^2)
# sorting by finding min_index
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 = [-2, 45, 0, 11, -9, 88, -97, -202, 747]
size = len(arr)
selectionSort(arr, size)
print('The array after sorting in Ascending Order by selection sort is:')
print(arr)
```

The array after sorting in Ascending Order by selection sort is:
[-202, -97, -9, -2, 0, 11, 45, 88, 747]

In []: