Practical No. : 3

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Aim : Implement Selection Sort using Greedy Search Algorthm.
Code :

```
def selectionSort(arr):
    n = len(arr)

    # Traverse through all elements in the array
    for i in range(n):
        # Find the minimum element in the unsorted portion of the list
        min_index = i
        for j in range(i + 1, n):
            if arr[j] < arr[min_index]:
                min_index = j

        # Swap the found minimum element with the first element of the unsorted part
        arr[i], arr[min_index] = arr[min_index], arr[i]

    return arr

if __name__ == "__main__":
    # Take input from the user
    arr = list(map(int, input("Enter the elements of the array (space-separated): ").split()))

    print("Original Array:", arr)
    sorted_arr = selectionSort(arr)
    print("Sorted Array:", sorted_arr)
```

Output:

```
Enter the elements of the array (space-separated):    10 40 30 60 50
Original Array: [10, 40, 30, 60, 50]
Sorted Array: [10, 30, 40, 50, 60]
```