

Code:

```
# function for selection sort
def selection_sort(arr,n):
    for i in range(n-1):
        mina=i
        for j in range(i+1,n):
            if arr[j]<arr[mina]:
                mina=j
        (arr[i],arr[mina])=(arr[mina],arr[i])
    print("Marks after sorting",arr)

# function for bubble sort
def bubble_sort(arr,n):
    for i in range(n):
        for j in range(0,n-i-1):
            if arr[j]>arr[j+1]:
                (arr[j],arr[j+1])=(arr[j+1],arr[j])
    print("Marks after sorting",arr)

# function to print top 5 scores
def printarr(arr,n):
    print("top 5 scores are:")
    for i in range(0, 5):
        print(arr[n - i - 1], end=" ")

print("1.Selection Sort")
print("2.Bubble Sort")
c=int(input("Select your choice:"))

if c==1 or c==2:
    n=int (input("enter the no. of students: "))
    arr=[]
    for i in range (n):
        a=float(input("enter the percentage:"))
        arr.append(a)

if c==1:
    print("Marks before sorting",arr)
```

```
        selection_sort(arr,n)
        printarr(arr,n)
elif c==2:
    print("Marks before sorting", arr)
    bubble_sort(arr,n)
    printarr(arr, n)
else:
    print("Invalid Choice")
```

Output:

1.Selection Sort

2.Bubble Sort

Select your choice:1

enter the no. of students: 7

enter the percentage:58.69

enter the percentage:89

enter the percentage:65.5

enter the percentage:36.8

enter the percentage:98

enter the percentage:74

enter the percentage:49

Marks before sorting [58.69, 89.0, 65.5, 36.8, 98.0, 74.0, 49.0]

Marks after sorting [36.8, 49.0, 58.69, 65.5, 74.0, 89.0, 98.0]

top 5 scores are:

98.0 89.0 74.0 65.5 58.69

Output:

1.Selection Sort

2.Bubble Sort

Select your choice:2

enter the no. of students: 7

enter the percentage:58

enter the percentage:89.5

enter the percentage:77.89

enter the percentage:55.99

enter the percentage:89

enter the percentage:75

enter the percentage:91

Marks before sorting [58.0, 89.5, 77.89, 55.99, 89.0, 75.0, 91.0]

Marks after sorting [55.99, 58.0, 75.0, 77.89, 89.0, 89.5, 91.0]

top 5 scores are:

91.0 89.5 89.0 77.89 75.0

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