

NAME: Samarth Khorate

YEAR: SE **DIV:** A(A2)

EXPRIMENT NO :6

```
print("Samarth Khorate(22539) SE AIDS")

def quick_sort(arr):
    if len(arr) <= 1:
        return arr

    pivot = arr[len(arr) // 2]
    left = [x for x in arr if x < pivot]
    middle = [x for x in arr if x == pivot]
    right = [x for x in arr if x > pivot]

    return quick_sort(left) + middle + quick_sort(right)

def display_top_scores(scores, top_n=5):
    if len(scores) < top_n:
        top_n = len(scores)

    top_scores = scores[-top_n:][::-1] # Get the top N scores and reverse the order
    print(f"Top {top_n} scores:")
    for i, score in enumerate(top_scores, start=1):
        print(f"{i}. {score}%")

def main():
    num_students = int(input("Enter the number of students: "))
    scores = []
```

```
for i in range(num_students):

    score = float(input(f"Enter the percentage for student {i + 1}: "))

    scores.append(score)


sorted_scores = quick_sort(scores)

display_top_scores(sorted_scores)


if __name__ == "__main__":

    main()
```

OUTPUT:

```
python/samarth6.py""
PS D:\college material\python> & C:/Users/User/AppData/Local/Programs/Python/Python311/python.exe "d:/college material/python/samarth6.py"
Samarth Khorate(22539) SE AIDS
Enter the number of students: 4
Enter the percentage for student 1: 66
Enter the percentage for student 2: 77
Enter the percentage for student 3: 88
Enter the percentage for student 4: 99
Top 4 scores:
1. 99.0%
2. 88.0%
3. 77.0%
4. 66.0%
PS D:\college material\python> █
```