**Zeal College of Engineering and Research**

**Subject: DSL**

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**Group B: Practical No: 07**

**Program Statement**:

Write a Python program to store first year percentage of students in array. Write function for sorting array of floating point numbers in ascending order using quick sort and display top five scores.

**Code:**

#Pratical 7

def partition(array, low, high):

  pivot = array[high]

  i = low - 1

  for j in range(low, high):

    if array[j] <= pivot:

      i = i + 1

      (array[i], array[j]) = (array[j], array[i])

      (array[i + 1], array[high]) = (array[high], array[i + 1])

  return i + 1

def quickSort(array, low, high):

  if low < high:

    pi = partition(array, low, high)

    quickSort(array, low, pi - 1)

    quickSort(array, pi + 1, high)

data = [80, 70, 20, 100, 00, 90, 65,75,56,89]

print("Unsorted Array of student percentage:")

print(data)

size = len(data)

quickSort(data, 0, size - 1)

print('Sorted Array of student percentage in Ascending Order:')

print(data)

print("top 5 percentage of student is :")

for i in range(1,6):

  print(data[i])

**Output (Screenshot):**

