**PYTHON PROGRAM 1:**

**Python Program for QuickSort.**

def partition(arr,low,high):

i = ( low-1 )

pivot = arr[high]

for j in range(low , high):

if arr[j] <= pivot:

i = i+1

arr[i],arr[j] = arr[j],arr[i]

arr[i+1],arr[high] = arr[high],arr[i+1]

return ( i+1 )

def quickSort(arr,low,high):

if low < high:

pi = partition(arr,low,high)

quickSort(arr, low, pi-1)

quickSort(arr, pi+1, high)

arr = [10, 7, 8, 9, 1, 5]

n = len(arr)

quickSort(arr,0,n-1)

print ("Sorted array is:")

for i in range(n):

print ("%d" %arr[i])

**OUTPUT:**

