## **Central university of Haryana**

Department of computer science & engineering under SOET



ADA lab
(BT CS 505A)
Lab-3.

Submitted by:-

submitted to:-

Ponnaganti pavan kumar

anant rajee bara

**ROLL NO: 202102** 

## Lab-1: Implement quick\_sort

Code:

```
ያ ada ▼ python_lab / quic_sort.py
```



pavan-kumar-202102 quick sort version 1

**८**२ 1 contributor

```
26 lines (22 sloc) 693 Bytes
      import numbers
  3
     array=[8,7,6,1,0,9,2]
  5
     def partation(array,r_index,l_index):
          pevot=array[r_index]
  6
  7
          j=l_index
         for i in range(l_index,r_index):
  8
  9
              # print(j)
              if(array[i]<=pevot):</pre>
 10
                  array[j],array[i]=array[i],array[j]
 11
 12
                  j+=1
 13
          array[j],array[r_index]=array[r_index],array[j]
 14
          return j
 15
      def quicksort(array, r_index,l_index):
 16
 17
              if l_index>=r_index:
 18
                  return
 19
              else:
                  pivot_index=partation(array,r_index,l_index)
 20
 21
                  # print(l_index,r_index,pivot_index)
 22
                  quicksort(array,pivot_index-1,l_index)
 23
                  quicksort(array,r_index,pivot_index+1)
 24
 25
      quicksort(array,len(array)-1,0)
 26
      print(array)
```

## **Output:**

```
PS E:\sem 5\lab program> python -u "e:\sem 5\lab program\quic_sort.py"

[0, 1, 2, 6, 7, 8, 9]

PS E:\sem 5\lab program> 

[0, 1, 2, 6, 7, 8, 9]
```

## Github link:

https://github.com/pavan-kumar-202102/python\_lab/blob/ada/quic\_sort.py