

ASSIGNMENT NO:6

ROLL NO:07

```
def quicksort(a,start,s):
```

```
if(start>=s):
```

```
    return
```

```
p=partition(a,start,s)
```

```
quicksort(a,start,p-1)
```

```
    quicksort(a,p+1,s)
```

```
def partition(a,start,s):
```

```
    pivot=a[start]    low=start+1    high=s
```

```
while True:            while(low<=high and
```

```
a[low]<=pivot):
```

```
    low=low+1        while(low<=high
```

```
and a[high]>=pivot):
```

```
    high=high-1
```

```
if(low<=high):
```

```
    a[low],a[high]=a[high],a[low]
```

```
else:
```

```
    break
```

```
    a[start],a[high]=a[high],a[start]
```

```
return high
```

```
a=[]
```

```
s=int(input("enter the no of students:"))
```

```
count=1 for i in range(0,s):    start=int(input("enter the  
percentage of the students:"))    a.append(start)
```

```
count=count+1
```

```
print(a)
```

```
print("enter choice:\n1.quicksort\n2.exit")
```

```
ch=int(input()) if
```

```
ch==1:
```

```
quicksort(a,0,s-1)
print(a) elif ch==2:
    exit else:
print("Invalid choice")
```

OUTPUT:

```
enter the no of students:4
enter the percentage of the students:96
enter the percentage of the students:85
enter the percentage of the students:74
enter the percentage of the students:12
[96, 85, 74, 12]
enter choice:
1.quick sort
2.exit
1
[12, 74, 85, 96]
```