



**DSA LAB**  
**COC2910**

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```
zaid Cpp College Assignments $ g++ Quick_sort.cpp
zaid Cpp College Assignments $ ./a.out
Enter the number of elements to generate in the array : 7
```

The Array generate is : 2 7 0 6 5 1 2

Pivot as the first Element :-

```
0 1 2 2 5 7 6
0 1 2 2 5 7 6
0 1 2 2 5 6 7
0 1 2 2 5 6 7
0 1 2 2 5 6 7
0 1 2 2 5 6 7
Total Comparisons :      12
```

Pivot at Median:-

```
0 1 2 2 5 7 6
0 1 2 2 5 6 7
0 1 2 2 5 6 7
Total Comparisons :      10
```

Pivot as mean:-

```
2 0 1 2 5 7 6
2 0 1 2 5 6 7
2 0 1 2 5 6 7
0 1 2 2 5 6 7
0 1 2 2 5 6 7
0 1 2 2 5 6 7
Total Comparisons :      20
```

Pivot at the middle element:-

```
2 0 5 1 2 6 7
2 0 1 2 5 6 7
0 2 1 2 5 6 7
0 1 2 2 5 6 7
0 1 2 2 5 6 7
Total Comparisons :      16zaid Cpp College Assignments $
```