In-class Example of Quicksort (refer QuickSort.java)

Original Array
4 14 6 9 7 22 3 8

Quicksort called with low = 0 and high = 7
Partition method called with low = 0 and high = 7
Subarray of the partition method:
4 14 6 9 7 22 3 8
Iteration # 0
i :1
j :6
i<j TRUE (1 < 6)
Iteration # 1
i :2
j :1
i<j FALSE (2 > 1) No need to swap...
Finally...swap arr[0] with arr[1]

Quicksort called with low = 2 and high = 7
Partition method called with low = 2 and high = 7
Subarray of the partition method:
6 9 7 22 14 8
Iteration # 0
i :3
j :2
i<j FALSE (3 > 2) No need to swap...
Finally...swap arr[2] with arr[2]

Quicksort called with low = 3 and high = 7
Partition method called with low = 3 and high = 7
Subarray of the partition method:
9 7 22 14 8
Iteration # 0
i :5
j :7
i<j TRUE (5 < 7)
Iteration # 1
i :6
j :5
i<j FALSE (6 > 5) No need to swap...
Finally...swap arr[3] with arr[5]

Quicksort called with low = 3 and high = 4
Partition method called with low = 3 and high = 4
Subarray of the partition method:
8 7
Iteration # 0
i :4
j :4
i<j FALSE (4 > 4) No need to swap...
Finally...swap arr[3] with arr[4]

Quicksort called with low = 6 and high = 7
Partition method called with low = 6 and high = 7
Subarray of the partition method:
14 22
Iteration # 0
i :7
j :6
i<j FALSE (7 > 6) No need to swap...
Finally...swap arr[6] with arr[6]

Array After Sorting:
3 4 6 7 8 9 14 22