Proje 1:

* [22, 27, 16, 2, 18, 6]

1) Insertion sort aşamaları:

[22, 27, 16, 2, 18, 6]

first lowest case is 2

[2, 27, 16, 22, 18, 6]

2nd lowest case is 6

[2, 6, 16, 22, 18, 27]

3rd lowest case 16 & its in right order

[2, 6, 16, 18, 22, 27]

4th lowest case is 18

5th lowest case 22 & its in right order

Final sorting: [2, 6, 16, 18, 22, 27]

2) Big O(n^2) comes from $\frac{n^2+n}{2}$

which has worse case = $\frac{36+6}{2} = 21$

3) Sorting has average case

4) 18 is included in 4th case

* First 4 cases of insertion sorting

of [7, 3, 5, 8, 2, 9, 4, 15, 6]

1st lowest case is 2 (1 step)

[2, 3, 5, 8, 7, 9, 4, 15, 6]

2nd lowest case is 3 & it's in right order (2 step)

3rd lowest case is 4 (3 step)

[2, 3, 4, 8, 7, 9, 5, 15, 6]

4th lowest case is 5 (4 step)

[2, 3, 4, 5, 7, 9, 8, 15, 6]