

# PROJE 1

[22, 27, 16, 2, 18, 6] → Insertion Sort

1. [22, 27, 16, 2, 18, 6]  $n$

[2, 27, 16, 22, 18, 6]  $n-1$

[2, 6, 16, 22, 18, 27]  $n-2$

[2, 6, 16, 18, 22, 27] 1

2.  $n + (n-1) + (n-2) \dots + 1 = n \cdot \frac{n+1}{2} = \frac{n^2 + n}{2} \Rightarrow O(n^2)$

3. Time Complexity: Average case

4. 18 sayısı Average Case kapsamına girer

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

[2, 3, 5, 8, 7, 9, 4, 15, 6] 1. Adım

[2, 3, 4, 8, 7, 9, 5, 15, 6] 2. Adım

[2, 3, 4, 5, 7, 9, 8, 15, 6] 3. Adım

[2, 3, 4, 5, 6, 9, 8, 15, 7] 4. Adım