

14/10/2024

project: 1

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

* Insertion Sort aşamaları:

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

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

3. $[2, 6, 16, 18, 22, 27]$

* Big-O gösterimi:

$$\frac{n(n+1)}{2} = \frac{n^2 + n}{2}$$

$$\Rightarrow O(n^2)$$

* Dizi Sıralandıktan sonra 18 sayısı, worst case'ye girer çünkü sırada bulundu.

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

1. $[2, 3, 5, 8, 7, 9, 4, 15, 6]$

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

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

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

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

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