Proje 1

[22,27,16,2,18,6] -> Insertion Sort

1.) [22,* 27, 16, 2, 18, 6]
[22, 27, *16, 2, 18, 6]
[16, 22, 27,* 2, 18, 6]
[2, 16, 22, 27,* 18, 6]
[2, 16, 18, 22, 27,*, 6]
[2, 6, 16, 18, 22, 27,*]

2.) Average Case : $O(n^2)$
Worst Case : $O(n^2)$
Best Case : $O(n)$

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

4. Orta kısımda yer aldığı için averager case kullanılır.

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

****

Proje 2

[16,21,11,8,12,22] -> Merge Sort

--> [16,21,11,8,12,22] ilk önce ikiye ayırıyoruz

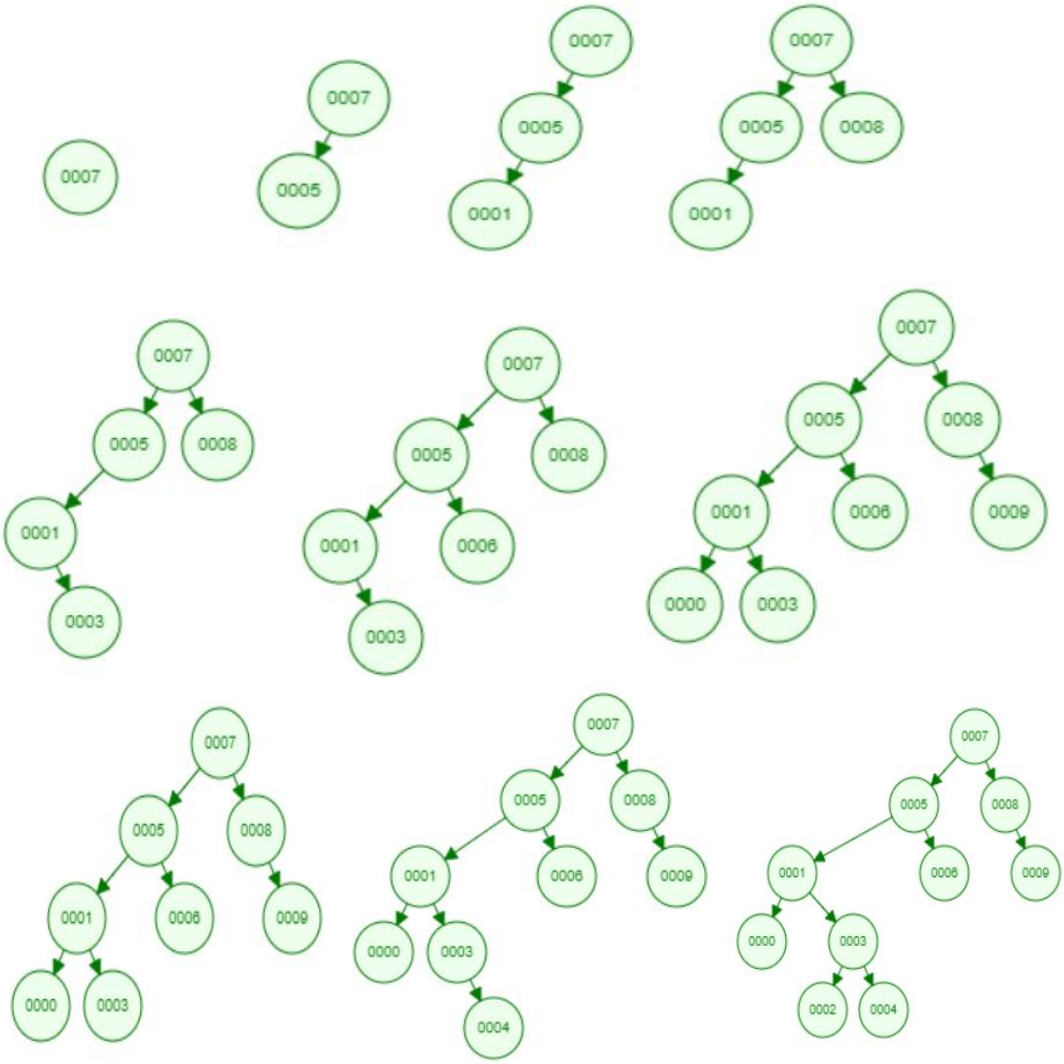
[16,21,11] [8,12,22]
[16,21] [11] [8,12] [22]
[11,16,21] [8,12,22]
[8,11,12,16,21,22]

--> nlogn

****

Proje 3

[7, 5, 1, 8, 3, 6, 0, 9, 4, 2] dizisinin Binary-Search-Tree aşamalarını yazınız.



Grafik Linki için ise :

https://www.cs.usfca.edu/~galles/visualization/BST.html