**1)**

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

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

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

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

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

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

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

**2)** O(nlogn)