

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

[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]

$O(n \log n)$