

Analysis for Non-Recursive Algorithm

1) Input size is $\Rightarrow n$

2) Basic operation

i) comparison

1-candle > max_height

2-candle == max_height

ii) Assignment

1-max_height = candle

iii) increment

1-Count++

3) Time complexity

$$\sum_{i=0}^n 1 = n - 0 + 1 = n + 1 \approx \theta(n)$$

Bec .there is one loop