

300. Longest Increasing Subsequence

10 9 2 5 3 7 10 18

↳ 9 > 10?

1 1 1 1 1 1 1 1

10 9 2 < 3 7 10 18

↳ 2 > 10?

1 1 1 1 1 1 1 1

10 9 2 5 3 7 10 18

↳ 2 > 9?

1 1 1 1 1 1 1 1

10 9 2 < 3 7 10 18

↳ 5 > 10?

1 1 1 1 1 1 1 1

10 9 2 < 3 7 10 18

↳ 5 > 9?

1 1 1 1 1 1 1 1

10 9 2 < 3 7 10 18

↳ 5 > 2?

1 1 1 2 1 1 1 1

10 9 2 5 3 7 10 18

↳ 3 > 2?

1 1 1 2 2 1 1 1

10 9 2 < 3 7 10 18

↳ 7 > 2 → dp = 2

↳ 7 > 5 → dp = 3

↳ 7 > 3 → dp = 3

1 1 1 2 2 3 1 1

10 9 2 < 3 7 10 18

↳ 10 > 10 → dp = 2

↳ 10 > 9 → dp = 2

↳ 10 > 2 → dp = 2

↳ 10 > 5 → dp = 3

↳ 10 > 3 → dp = 3

↳ 10 > 7 → dp = 4

1 1 1 2 2 3 4 1

10 9 2 5 3 7 10 18

↳ 18 > {10, 9, 2, 5, 3, 7} → max dp = 4

1 1 1 2 2 3 4 4

→ se retorna el max de dp

→ caso prev < actual, se saca el valor de dp[prev] → se compara cual es mayor dp[i] = dp[prev] + 1