Explanantion

Understanding DP Dimensions:

Your current problem needs 1D DP because:

- dp[i] = "Can we reach the last index starting from position i?"
- Only one parameter changes: the current position |

When would you need 2D DP?

You'd need 2D DP if you had **two changing parameters**. For example, if the problem was modified to:

"Can you reach the last index with exactly K jumps?"

Then you'd need:

- dp[i][j] = "Can we reach the last index starting from position i with exactly j jumps remaining?"
- Two changing parameters: position and remaining jumps

What each cell means in different scenarios:

1D DP (your current problem):

• dp[i] = Boolean indicating if you can reach the last index from position i

2D DP (hypothetical modified problem):

• dp[i][j] = Boolean indicating if you can reach the last index from position i using exactly j jumps

Explanantion