Start

Read input array nums

Initialize n as the length of nums

Initialize an array dp of size n with all elements set to 1

Initialize maxLen as 0

For i from 0 to n-1

Set dp[i] = 1

For j from 0 to i-1

If nums[i] > nums[j]

Set dp[i] = max(dp[i], dp[j] + 1)

Set maxLen = max(maxLen, dp[i])

Print maxLen

End