Questions

1. Implement the Knapsack problem using dynamic programming approach. You have to input the followings from the user:
   Number of Items:n
   Weight of each item w_n
   Profit of each item P_n
   Capacity of the sack W Return the maximum profit attained

2. Given an array arr[] of size N, the task is to find the length of the Longest Increasing Subsequence (LIS) i.e., the longest possible subsequence in which the elements of the subsequence are sorted in increasing order.

3. Given two strings S[1..m] and T[1..n], find the length of longest subsequence that occurs both in S and T.

4. Given an integer array nums, find a subarray that has the largest product, and return the product.