**Notes:**

* You are required to upload your in–class implementations of problems 1 to canvas. This is due by 11:59 p.m. tonight.

**Objective:**

* Implement a solution using Dynamic Programming concepts.

**Problem:**

Write a function that takes two parameters **n** and **k** and returns the value of the Binomial Coefficient **C(n, k)** using **dynamic programming**. For example, your function should return 6 for n = 4 and k = 2 and it should return 10 for n = 5 and n = 2. You should also implement a driver class that reads in the values of n and k provided by the user.

A Binomial Coefficient gives the number of ways disregarding the order, that k objects can be chosen among n objects or the number of k-element sunsets of an n-element set.

The value of C(n, k) can be recursively calculated as follows:

C(n, k) = C(n-1, k-1) + C(n-1, k)

C(n, 0) = C(n, n) = 1

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