Research the algorithms and make a prediction about which algorithm will perform better. Research memory requirements, the number of operations, and algorithm complexity. Implement both algorithms in code. Create a fixture to use both algorithms on the same data set multiple times and measure the run time of how long it takes for each algorithm to complete the task. Please use inputs large enough to provide data suggesting a clear winner. Make a video where you explain the two algorithms, share your research, and present your data.

Typically dynamic programming requires more memory space, and more time to complete the program. A divide and conquer algorithm uses less memory and time to complete a program. Dynamic complexity is O(n \* 1) and divide and conquer is O(nLogn). I predict that the divide and conquer will take less time than the dynamic program.

Try 1:

* Dynamic
  + 53504340 | .000175 seconds
* Divide
  + 53504340 | .473233 seconds

Try 2:

* Dynamic
  + 53504340 | 000154 seconds
* Divide
  + 53504340 | .466211 seconds

Try 3:

* Dynamic
  + 53504340 | .000204 seconds
* Divide
  + 53504340 | .500760 seconds

After my research I was proven wrong, the dynamic program solved the binomial coefficient a lot faster than the divide and conquer did. I believe this is becaus the dynamic program is a lot more efficient in how it solves the binomial coefficient.