I have found that Memoization always solves the least amount of sub problems, followed mostly by the dynamic approach of bottom up and followed by recursion. The farther away n is away from K the longer it takes to compute I have found. While all of them give you the same answer it each solves it in separate sub problems. One interesting thing I found is that if you choose to numbers very close together, for instance 54,52 that recursion was faster than dynamic bottom up Method. I have attached pictures in the file to show my output and have attached my code to the turn in.