

Poker Hands

Suppose you are a game developer in a company. You are developing the game of poker and you want to figure out the total possible combinations of 2 cards that can be dealt as hands and total possible combinations of 5 cards which can be put down on the table as Flop + Turn + River, out of the deck of 52 cards.

Binomial coefficient is used to find all possible unordered combinations from all possibilities. Binomial coefficient is also called '**n choose k**', where you choose k items from n. And mathematically it is represented as:

$$\text{Combinations} = n! / (k! * (n - k)!)$$

You are provided with a module called **recursion_and_iteration**, which contains three methods; **n_choose_k()**, **recursive_factorial()**, and **iterative_factorial()**.

Tasks

-- Implement the method **recursive_factorial()**, which calculates the factorial of a number by recursion.

-- Implement the method **iterative_factorial()**, which calculates the factorial of a number by iteration.