## Ex1

See `example1.cpp` how to define operators and member functions for a struct.

## Ex2

Do not use the common factorial Formular! It wont work! use this Formular as a basis:

$$\binom{n}{k} = \frac{n \cdot (n-1) \cdot ... \cdot (n-(k-1))}{k!}$$

For example:

$$\binom{102}{3} = \frac{102 \cdot 101 \cdot 100}{3 \cdot 2 \cdot 1} = 101 \cdot 34 \cdot 50$$

Also see `example2.cpp` if you want to see how to calculate factorial in compile time.

## Ex3

Use Backtracking and Recursion: see `expmple3.cpp` for an Example of Backtracking.