Task

Implement a calculator as a console application that allows to enter 2 numbers and the operation to be performed on these numbers. The basic set of functions that should be present:

- Addition, subtraction, multiplication, division, exponentiation, factorial. Conditions that the solution must meet:
 - Variables, conditional constructs, loops, and methods should be used.

Additional Conditions for Extra Points:

- Input is made with an infinite loop with an exit condition.
- All repetitive logic is implemented in methods that return values and accept parameters.
- It should be impossible to break it with arithmetic actions or incorrect input.

Super Additional Conditions for Extra Points:

For particularly inquisitive minds, you can try writing a solution that will allow mathematical expression to be entered as a single string, and output the result of the calculation.

P.S. Randoms can be used for demonstration purposes.

The solution should contain a project that is a console application and should be placed on the https://github.com service.