Collatz Conjecture "Solver"
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We need a program investigating basic characteristics of Collatz sequence
for starting numbers given by user input.

For some background see Collatz conjecture described e.g. here:
http://en.wikipedia.org/wiki/Collatz_conjecture

Write a C++ program buildable for Windows OS with

Input:

* A natural number n (decimal system)
  Number of digits is not limited - it can be for example:
  22539384258791235613820482048403749302749302847749300203742228918001739 3
  (however, let us say 1000 digits is enough on UI level for this test)

Output:

* The following characteristics of the Collatz sequence starting with n:
  - Number of 3k+1 operations (= number of odd members, excluding '1')
  - Number of k/2 operations (= number of even members)
  - Maximum member

Example:

Input:
n: 7

(the sequence: 7, 22, 11, 34, 17, 52, 26, 13, 40, 20, 10, 5, 16, 8, 4, 2, 1)

Output:
Number of 3k+1 operations: 5
Number of 2k operations: 11
Maximum member: 52

Additional Requirements:
Could be a console application but a simple practical dialog UI is preferred.
After providing output, program should allow user to repeat with another input.

In any case, separate the calculation logic and UI parts well.
The calculation logic should be integrated with another existing UI easily.

Deliver as an executable and sources (best would be with a MS VS Project).

Notes:
The goal is a working solution that can be used for the specified purpose.
Calculation time is not the highest prio (unless it is 'terribly slow').
Focus on the code structure and proper usage of the programming language.
Do not hesitate to use comments in code - as usually.
This task has no commercial use (apparently and the solution will be used solely
for our assessment of capabilities and habits of its solvers as C++ programmers.
The solution does not need to be perfect - we assume the time needed to implement a
good working solution would not exceed 1 man-day.
Program can hang if the input number proves Collatz conjecture is false