# **Lab4 Date Calculator**

For this problem you need to read data **from the text file** and do some operations on dates.

You should implement 3 functions by yourself in class calculator:

- 1. Open the file and read all the operations from the file.
- 2. Add the days at the date.
- 3. Minus the days at the date.

You need to consider that February has 29 days in the leap year.

#### Hint for fstream:

Reference website: https://www.cplusplus.com/reference/fstream/fstream/ Or see the Slide "01\_C++UsefulFunctions\_voice" Your file should be put in the same directory of your c++ project.

### **Input Format**

Each line contains an operator, a date, and a number of days in the file.

The date of the test data is in the range of [2000/01/01, 2022/12/31].

You need to add or minus the number of days at the date according to the operator.

- e.g. + 2020/01/31 1 means the date is 2020/01/31, and you need to add 1 day.
- e.g. 2020/01/31 1 means the date is 2020/01/31, and you need to minus 1 day.

## **Output Format**

Print the result of the calculation.

The format of the date needs to satisfy 20xx/xx/xx, where 'x' presents a number. e.g. if the result is 2001/1/1, you need to show 2001/01/01

# Sample Input & Output

Input	Output
+ 2000/01/01 300	2000/10/27
- 2020/10/31 211	2020/04/03
+ 2011/01/06 0	2011/01/06
- 2011/10/01 31	2011/08/31
+ 2003/10/04 365	2004/10/03
+ 2009/04/05 7	2009/04/12
- 2020/01/17 17	2019/12/31