

Lab4 Date Comparator

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

You must use the template to finish this assignment.

You should implement 3 functions by yourself in class calculator:

1. Open the file and read all pairs of dates **from the file**.
2. Compare the order of two dates.
3. Calculate the number of days between two dates.

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 two dates in the file.

The date of the test data is in the range of [2000/01/01, 2023/12/31].

You need to compare the order of two dates and calculate the number of days between two dates.

e.g. 2019/01/01 2020/01/01 means 2019/01/01 is before 2020/01/01 and there are 365 days between them.

e.g. 2023/02/28 2023/01/01 means 2023/02/28 is after 2023/01/01 and there are 58 days between them.

Output Format

Print the result of the calculation on the screen.

You can check your answer via "output1.txt" and "output2.txt".

Sample Input & Output

Input	Output
2000/01/01 2000/10/27	the order of two dates: [2000/01/01 2000/10/27] the number of days between two dates: 300
2020/10/31 2020/04/03	the order of two dates: [2020/04/03 2020/10/31] the number of days between two dates: 211
2011/01/06 2011/01/06	the order of two dates: [2011/01/06 2011/01/06] the number of days between two dates: 0

Input	Output
2000/01/01 2000/10/27	the order of two dates: [2000/01/01 2000/10/27] the number of days between two dates: 300
2011/10/01 2011/08/31	the order of two dates: [2011/08/31 2011/10/01] the number of days between two dates: 31
2003/10/04 2004/10/03	the order of two dates: [2003/10/04 2004/10/03] the number of days between two dates: 365
2009/04/05 2009/04/12	the order of two dates: [2009/04/05 2009/04/12] the number of days between two dates: 7
2020/01/17 2019/12/31	the order of two dates: [2019/12/31 2020/01/17] the number of days between two dates: 17