



Problem: Week 8 - Analyze Code Submission of a Programming Contest

Description

Data about submission of a programming contest consists a sequence of lines, each line has the following information:

`<UserID> <ProblemID> <TimePoint> <Status> <Point>`

in which the user `<UserID>` submits his/her code to solve the problem `<ProblemID>` at time-point `<TimePoint>`, and gets status `<Status>` and point `<Point>`

- `<UserID>`: string of length from 3 to 10
- `<ProblemID>`: string under the format `Pxy` where `x, y` are digits 0,1,...,9 (for example `P03`, `P10`)
- `<TimePoint>`: string representing time-point with the format `HH:MM:SS` (for example, `09:45:20` means the time-point 9 hour 45 minutes 20 seconds)
- `<Status>`: string with two cases (ERR, OK)
- `<Point>`: integer from {0, 1, 2, ..., 10}

A user can submit the code for solving each problem several time. The point that the user gets for a problem is the maximal point among the submissions for that problem.

Perform a sequence of queries of following types:

- ?total_number_submissions: return the number of submissions of the contest
- ?number_error_submission: return the number of submissions having status ERR
- ?number_error_submission_of_user <UserID>: return the number of submission having status ERR of user <UserID>
- ?total_point_of_user <UserID>: return the total point of user <UserID>
- ?number_submission_period <from_time_point> <to_time_point>: return the number of submissions in the period from <from_time_point> to <to_time_point> (inclusive)

Input

The input consists of two blocks of data:

- The first block is the operational data, which is a sequence of lines (number of lines can be up to 100000), each line contains the information of a submission with above format .The first block is terminated with a line containing the character #
- The second block is the query block, which is a sequence of lines (number of lines can be up to 100000), each line is a query described above. The second block is terminated with a line containing the character #

Output

Write in each line, the result of the corresponding query

Example

Input

U001 P01 10:30:20 ERR 0

U001 P01 10:35:20 OK 10

U001 P02 10:40:20 ERR 0

U001 P02 10:55:20 OK 7

U002 P01 10:40:20 ERR 0

U001 P01 11:35:20 OK 8

U002 P02 10:40:20 OK 10

#

?total_number_submissions

?number_error_submission

?number_error_submission_of_user U002

?total_point_of_user U001

?number_submission_period 10:00:00 11:30:45

#

Output

7

3

1

17

6

Sample TestCase

C 17

```
1 Example
2 Input
3 U001 P01 10:30:20 ERR 0
4 U001 P01 10:35:20 OK 10
5 U001 P02 10:40:20 ERR 0
6 U001 P02 10:55:20 OK 7
7 U002 P01 10:40:20 ERR 0
8 U001 P01 11:35:20 OK 8
9 U002 P02 10:40:20 OK 10
10 #
11 ?total_number_submissions
12 ?number_error_submission
13 ?number_error_submission_of_user U002
14 ?total_point_of_user U001
15 ?number_submission_period 10:00:00 11:30:45
16 #
17
18
19 Output
20 7
21 3
22 1
```

Source code

C 17

```
1 //C
2 #include <stdio.h>
3
4 int main()
5 {
6
7 }
```

SUBMIT CODE

Currently, this contest problem is not open for submissions

Or

C 17

Select file

SUBMIT

Q Tìm kiếm

×

↺

ID	Bài tập	Trạng thái	Message	Điểm
125394	ANALYZE_CODE_SUBMISSION	Accept	<div>i</div>	100

ID	Bài tập	Trạng thái	Message	Điểm
5 hàng ▾ < < 1-1 của 1 > >				