



Problem: Week 7 - Bank Transaction

Description

The data about bank transactions consists of a sequence of transactions: the information of each transaction has the following format:

<from_account> <to_account> <money>

<time_point> <atm>

In which:

- <from_account>: the account from which money is transferred (which is a string of length from 6 to 20)
- <to_account>: the account which receives money in the transaction (which is a string of length from 6 to 20)
- <money>: amount of money transferred in the transaction (which is an integer from 1 to 10000)
- <time_point>: the time point at which the transaction is performed, it is a string under the format HH:MM:SS (hour: minute: second)
- <atm>: the code of the ATM where the transaction is taken (a string of length from 3 to 10)

Example: T00112233445 T001234002 2000 08:36:25 BIDV (at the ATM BIDV, account T00112233445 transfers 2000\$ to account T001234002 at time point 08:36:25 (08 hour, 36 minutes, 25 seconds))

A *transaction cycle* of length k starting from account $a1$ is defined to be a sequence of distinct account $a1, a2, \dots, ak$ in which there are transactions from account $a1$ to $a2$, from $a2$ to $a3$, ..., from ak to $a1$.

Write a program that process the following queries:

- ?number_transactions: compute the total number of transactions of the data
- ?total_money_transaction: compute the total amount of money of transactions
- ?list_sorted_accounts: compute the sequence of bank accounts (including sending and receiving accounts) appearing in the transaction (sorted in an increasing (alphabetical) order)
- ?total_money_transaction_from <account>: compute the total amount of money transferred from the account <account>
- ?inspect_cycle <account> k : return 1 if there is a *transaction cycle* of length k , starting from <account>, and return 0, otherwise

Input (stdin)

The input consists of 2 blocks of information: the data block and the query block

- The data block consists of lines:
 - o Each line contains the information about a transaction described above
 - o The data is terminated by a line containing #
- The query block consists of lines:
 - o Each line is a query described above
 - o The query block is terminated by a line containing #

Output (stdout)

- Print to stdout (in each line) the result of each query described above

Example**Input**

```
T000010010 T000010020 1000 10:20:30 ATM1
T000010010 T000010030 2000 10:02:30 ATM2
T000010010 T000010040 1500 09:23:30 ATM1
T000010020 T000010030 3000 08:20:31 ATM1
T000010030 T000010010 4000 12:40:00 ATM2
T000010040 T000010010 2000 10:30:00 ATM1
T000010020 T000010040 3000 08:20:31 ATM1
T000010040 T000010030 2000 11:30:00 ATM1
T000010040 T000010030 1000 18:30:00 ATM1
```

#

?number_transactions

?total_money_transaction

?list_sorted_accounts

?total_money_transaction_from T000010010

?inspect_cycle T000010010 3

#

Output

9

19500

T000010010 T000010020 T000010030 T000010040

4500

1

Sample TestCase

C 17



1 Write your Source code here

Source code

C 17



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

```
6  
7 }
```

SUBMIT CODE

Currently, this contest problem is not open for submissions

Or

C 17





Select file

SUBMIT

🔍 Tìm kiếm



ID	Bài tập	Trạng thái	Message	Điểm	Ng
0129be	BANK_TRANS_BASIC	Accept		250	CP
5f9a5d	BANK_TRANS_BASIC	Partial		200	CP

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