Popularity

1.1 Description

Some stations are too popular that Meows frequently can't get a ticket to their destination. Therefore, it's time to come up with a sorting system to sort the stations according to their popularity so that the total number of tickets can be increased based on the ranking.

Help the MRT management to implement the sorting system based on the tickets sold for each route.

1.2 Test Case Requirement

Must run in under 3 seconds for the cases in the Github repository.

1.3 Input

The first line will be an integer representing the number of test cases.

Each case begins with an integer, N representing the number of connections in the MRT system.

The next N lines will contain strings and an integer of the format a -> b T detailing a connection between a and b with T tickets sold per day.

1.4 Output

The first line of the output contains the total number of stations.

The next N lines contain the sorted stations in which the station with the most tickets sold will be ranked as the first. For example:

```
14
Rhode Island , 3005
Wisconsin , 2979
Vermont , 2929
Cyberjaya , 2740
Pelabuhan Klang , 2664
Ampang , 2600
Tanjung Karang , 2551
Delaware , 2545
Mersing , 2498
Bandar Baru Bangi , 2496
Rawang , 2491
Damansara , 2450
Batu Pahat , 2441
Lipis , 2440
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