**Rush Race**

**Input:** Standard Input, **Output:** Standard Output

**Time Limit:** 1 second(s)

**Memory Limit:** 256 megabytes

**Problem Statement:**

You will be given some movement details of some racers. Also, you will be given a certain time range (in minutes) and distance covered (per minute) in that time range by each racer. You will be asked to show the position chart of the race at a given minute of that race.

Assume that:

1. Every racer will follow his own movement sequence again and again.
2. There will be no gap of minute in the given time range.
3. If two racers are at the same position at any asking minute, then consider their input order.

**Input:**

The first line contains an integer R (1 <= R <= 20), the number of racers. Next each of R lines contains a string W (1 <= |W| <= 20) - name of each racer (consists of lower and uppercase letters only) and an integer S (1 <= S <= 10) - the number of movement details of that racer. Then there will be S lines, each line contains three integers A, B (1 <= A <= B <= 100) - range of minutes, and X (1 <= X <= 1000) - distance passed per minute.

After all the racers' details, there will be an integer T (1 <= T <= 10), the number of times you will be asked to show the position chart. Then T lines will follow. Each line will contain an integer M (1 <= M <= 1012) - a minute number when you have to show the position chart.

**Output:**

You have to show the position chart at M'th minute. First, you have to print a line containing “position chart at minute M : ” (without quotes) where M is the minute number. Then R line follows. Each line contains the position number, the racer's name, and the total distance covered at that time.

See the input/output for exact formatting.

**Sample Input/Output:**

|  |  |
| --- | --- |
| **Sample Input** | **Sample Output** |
| 3  Emon 2  1 7 93  8 41 40  Mehedi 1  1 3 80  Mazedul 3  1 1 1  2 3 77  4 100 1000  4  33  1  3  1000000000000 | position chart at minute 33 :  1. Mazedul 30155  2. Mehedi 2640  3. Emon 1691  position chart at minute 1 :  1. Emon 93  2. Mehedi 80  3. Mazedul 1  position chart at minute 3 :  1. Emon 279  2. Mehedi 240  3. Mazedul 155  position chart at minute 1000000000000 :  1. Mazedul 971550000000000  2. Mehedi 80000000000000  3. Emon 49048780488013 |

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