MEC '16 P3 - Getting Good at Programming

Time limit: 1.0s **Memory limit:** 256M

Flowright wants to get good at programming. Programming is a game where you invest time to upgrade your skills. There are N skills, each with L_i levels. Each level of a skill has its own training time and experience value gained from improving that skill. However, the levels of a skill have to be upgraded in succession, i.e. you have to have upgraded the previous level of a skill before continuing. **Flowright**, being a passionate programmer, wants to maximize his experience earned in a given amount of time. In fact, as **Flowright** is very indecisive, he wants to know the maximum amount of experience he can gain in T amount of time.

Constraints

$1 \leq N, T, L_i, x_{l_i} \leq 100$

$1 \leq t_{l_i} \leq T$

Input Specification

The first line of input will contain two integers, N and T. The next N lines will be in the format $L_i\, t_1\, x_1\, t_2\, x_2 \ldots t_{L-1}\, x_{L-1}\, t_L\, x_L$.

L represents the number of levels for each skill. t and x represent the time needed to complete the level and the experience gained from completing the level, respectively.

Output Specification

A single integer for the maximum experience that **Flowright** can gain in the given amount of time.

Sample Input

```
3 20
2 10 1 10 19
1 10 10
1 20 15
```

Sample Output

```
20
```

Explanation for Sample Output

Although skill 3 is a good choice to upgrade, upgrading level 1 and 2 of skill 1 is the best choice.