



Problem E

Elise Loves Drinks

Time limit: 1 second

Memory limit: 2048 megabytes

Problem Description

Elise loves drinks; her life isn't complete without lots of drinks.

Elise decides to buy exactly one drink everyday for the next n days. Since she likes to make plans many days ahead, she has already decided what drink to buy in the n days.

There are 10-dollar coins and 100-dollar notes in circulation. At this moment, Elise has m notes and no coins.

The price of the drink she wants to buy on the i -th day costs a_i dollars, which is a multiple of 10 and is between 10 and 90 (inclusive). Additionally, Elise buys drinks from one of the following places:

- From a convenience store: In this case, Elise can choose to pay the cashier $\frac{a_i}{10}$ coins, or to pay a note and receive $10 - \frac{a_i}{10}$ coins as change.
- From a vending machine: Since vending machines don't accept notes, Elise can only choose to pay $\frac{a_i}{10}$ coins.

Elise soon notices that it is probably impossible to pay for all the drinks using only the notes she has on the first day and the coins she receives as change during the n days. Can you help her determine if it is possible to buy all n drinks? If yes, then as Elise hates coins, she also wants to know the maximum number of notes she can keep after n days.

Input Format

The first line contains two integers n and m , the number of days to buy drinks and the number of notes Elise has.

The i^{th} of the next n lines contains two integers t_i, a_i —the place and the price of the drink to be bought on the i^{th} day. $t_i = 0$ means that the drink is from a convenience store, and $t_i = 1$ means it's from a vending machine.

Output Format

If it is impossible to buy all the drinks, print -1 . Otherwise, print the maximum number of notes Elise can keep after n days.

Technical Specification

- $1 \leq n \leq 2 \times 10^5$
- $1 \leq m \leq 10^9$



- $t_i \in \{0, 1\}$ for $i = 1, 2, \dots, n$
- $10 \leq a_i \leq 90$ for $i = 1, 2, \dots, n$
- $10 \mid a_i$ for $i = 1, 2, \dots, n$

Sample Input 1

```
5 12
0 90
0 10
0 30
0 20
0 40
```

Sample Output 1

```
10
```

Sample Input 2

```
5 1000000000
0 90
0 30
1 30
1 20
1 40
```

Sample Output 2

```
-1
```

Sample Input 3

```
4 3
0 90
0 90
0 90
0 90
```

Sample Output 3

```
-1
```

Sample Input 4

```
10 100
0 20
0 40
1 30
0 30
1 20
1 10
0 80
0 40
1 10
1 20
```

Sample Output 4

```
97
```