**Cashier**

Time Limit 2 seconds

Vasya has recently got a job as a cashier at a local store. His day at work is L minutes long. Vasya has already memorized n regular customers, the i-th of which comes after ti minutes after the beginning of the day, and his service consumes minutes. It is guaranteed that no customer will arrive while Vasya is servicing another customer.

Vasya is a bit lazy, so he likes taking smoke breaks for a Minute each. Those breaks may go one after another, but Vasya must be present at work during all the time periods he must serve regular customers, otherwise one of them may alert his boss. What is the maximum number of breaks Vasya can take during the day?

**Input**

The first line contains three integer’s n, L and a (0≤ n≤, 1≤ L≤, 1≤a≤ L).

The i-th of the next n lines contains two integers’ and

(0≤ ≤ L −1, 1≤ ≤ L). It is guaranteed that + ≤ and + ≤ L.

**Output**

Output one integer — the maximum number of breaks.

**Examples**

|  |  |
| --- | --- |
| **Sample Input** | **Sample Output** |
| 2 11 3  0 1  1 1  0 5 2 | 3  2 |

**Note:**

In the first sample, Vasya can take 3 breaks starting after 2, 5 and 8 minutes after the beginning of the day. In the second sample, Vasya can take 2 breaks starting after 0 and 2 minutes after the beginning of the day. In the third sample, Vasya cannot take any breaks.