

**Time limit:** 1.0s    **Memory limit:** 16M

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## PEG Test - Halloween 2014

Kenny wants to go trick-or-treating too! But the street has many spooky decorations put up on it. Kenny doesn't like to be scared, so he avoids spooky areas.

There are  $L$  houses arranged in a line on the street, numbered from 1 to  $L$ . Each house will give exactly 1 unit of candy to Kenny. There are  $N$  spooky decorations on this street. The  $i$ -th decoration covers the street from house number  $a_i$  to  $b_i$ , inclusive, raising the spookiness of those houses by  $s_i$  spookiness units.

Kenny will be too scared to knock on any doors if the spookiness of a house is greater than or equal to  $S$ . The spookiness of a house is the sum of the spookinesses of all the decorations passing through it.

Determine the amount of candy Kenny can receive from all the houses on the street.

## Input Specification

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The first line of input will contain the integers:  $N, L, S$  ( $1 \leq N \leq 10\,000; 1 \leq L \leq 10^9; 1 \leq S \leq 10^7$ ).  
The next  $N$  lines of input will contain values  $a, b$  and  $s$  for each house. ( $1 \leq a_i, b_i \leq L; 1 \leq s_i \leq 1\,000$ ).

## Output Specification

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Output a single integer, the amount of candy that Kenny can get.

## Sample Input 1

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```
3 100 10
20 59 4
30 69 4
40 79 4
```

## Sample Output 1

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```
80
```

## Explanation 1

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Houses between number 40 and 59 inclusive have a spookiness of 12, which is 2spooky for Kenny. He can still get candy from houses 1 to 39, and 60 to 100.

## Sample Input 2

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```
2 10 4
3 5 2
5 7 2
```

## Sample Output 2

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```
9
```

## Explanation 2

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Only house 5 is 2spooky for Kenny.