You're given three non-negative integers $N$ ($0 \leq N \leq 999$), $A$, $B$, ($0 \leq A \leq B \leq 2000000000$). Count the number of integers in the interval $[A; B]$ which contain $N$ as a subsequence.

For example if $N = 3$, $A = 3$ and $B = 17$, there are two integers which contain $N$ as a subsequence: 3 and 13.

## Input

The input contains triples of numbers $A$, $B$ and $N$. The input ends with '`-1 -1 -1`'. This line should not be processed.

## Output

For each triple, output the answer on a new line.

## Sample Input

```
3 17 3
0 20 0
0 150 17
-1 -1 -1
```

## Sample Output

```
2
3
2
```