

# COCI '06 Contest 6 #5 V

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**Time limit:** 0.6s    **Memory limit:** 32M

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Zvonko is playing with digits again, even though his mother has warned him that he is doing too much math and should go outside to play with his friends.

In his latest game, Zvonko looks for **multiples** of an integer  $X$ , **composed only of certain digits**. A multiple of  $X$  is any number divisible by  $X$ .

In order to ruin Zvonko's fun, his mother decided to get a program that solves the problem. Write a program that calculates how many multiples of  $X$  are between  $A$  and  $B$  (inclusive), such that, when written in decimal, they contain only certain allowed digits.

## Input Specification

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The first line of input contains three integers  $X$ ,  $A$  and  $B$  ( $1 \leq X < 10^{11}$ ,  $1 \leq A \leq B < 10^{11}$ ). The second line contains the allowed digits. The digits will be given with no spaces, sorted in increasing order and without duplicates.

## Output Specification

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Output the number of multiples Zvonko can make on a single line.

## Sample Input 1

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2 1 20
0123456789
```

## Sample Output 1

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```
10
```

## Sample Input 2

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```
6 100 9294
23689
```

## Sample Output 2

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111

### Sample Input 3

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5 4395 9999999999  
12346789

### Sample Output 3

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0