



Megaprime Numbers

by  [_mfv_](#)

Problem

Submissions

Leaderboard

Discussions

Your submission will run against only preliminary test cases. Full test cases will run at the end of the day.

A **prime** number is an integer greater than **1** that has no positive divisors other than **1** and itself.

We call a number *megaprime* if it is prime and all of its individual digits are prime. For example, **53** is megaprime because it is prime and all its digits (**5** and **3**) are prime; however, **35** is not megaprime because it is not prime (it's divisible by **5** and **7**), and **13** is not megaprime because it has a non-prime digit (**1** is not prime).

Given two long integers, *first* and *last*, find and print the total number of megaprime numbers in the inclusive range between *first* and *last*.

Input Format

Two space-separated long integers describing the respective values of *first* and *last*.

Constraints

- $1 \leq \textit{first} \leq \textit{last} \leq 10^{15}$
- $\textit{last} - \textit{first} \leq 10^9$

Output Format

Print a long integer denoting the total number of megaprimes in the inclusive interval between *first* and *last*.

Sample Input 0

```
1 100
```

Sample Output 0

```
8
```

Explanation 0

There are eight megaprime numbers in the inclusive range from *first* = **1** to *last* = **100** (i.e., **2, 3, 5, 7, 23, 37, 53,** and **73**), so we print **8** as our answer.

[f](#) [t](#) [in](#)

Contest ends in 3 days

Submissions: [2127](#)



Max Score: 50




Difficulty: Medium

Rate This Challenge:

☆☆☆☆☆

[More](#)

Current Buffer (saved locally, editable)  

BASH   

1

 [Upload Code as File](#)☐ Test against custom input

Run Code

Submit Code

Join us on IRC at [#hackerrank](#) on freenode for hugs or bugs.

[Contest Calendar](#) | [Interview Prep](#) | [Blog](#) | [Scoring](#) | [Environment](#) | [FAQ](#) | [About Us](#) | [Support](#) | [Careers](#) | [Terms Of Service](#) | [Privacy Policy](#) | [Request a Feature](#)