**PROBLEMS**

1. **Prime Digit Count**
2. **Stop the explosion.**
3. **Pass the Test**

**Prime Digit Count:**

Tarun and Sunny are dealing with prime numbers and wanted to know which numbers occurs the most in the prime numbers of a given range(including). Find the nth most occurring number from the set of all prime numbers.

**Note:**

If there is more than one number for a given n print the highest number among it.

**Input Format:**

Natural number r

Natural number n

**Output Format:**

nth element.

**Sample Test Cases:**

**Input 1:**

13

4

**Output:**

5

**Input 2:**

69

8

**Output:**

6

**Love or Hate**

Raji and Sunny are best friends. She loved a guy named Raj. But sunny is a possessive best friend and don’t want Raji to get in love. So, he requested her not to do so. Raji always respects sunny but this time she denied his request. She told that he is smart and clever. He wanted to test his intelligence and promised her that if he solves my puzzle, he will be yours but if it doesn’t happen you should leave him. Being confident on her love she accepted to it. Help sunny to make raj, raji’s ex.

**Input format:**

Positive integer n.

**Output format:**

Positive integer.

**Sample Testcase:**

**Input 1:**

2793

**Output:**

51410

**Input 2:**

143

**Output:**

57

**Pass the test:**

Sunny and Tarun while going through the results of code3000 found that there is an x probability for n codes for a particular participant to qualify the challenge. Maintaining no change in the probability throughout the process, find the likelihood of that particular person qualifying for m codes.

**Input Format:**

Propobality p

Integer n

Integer m

**Constraints:** 0<p<1, 0<m<n<1000

**Output Format:** probability of the qualification rounded to 4 digits.

**Sample Test Cases:**

**Input 1:**

0.9

20

5

**Output:**

0.4377

**Input 2:**

0.45

8

2

**Output:**

0.1388

Hello 104,

I welcome you all to this **CODE3000-2.0** round 2 which has 5 challenges in the coming 5 weeks and submission of the code and getting cutoff marks for at least 3 challenges is must and should for proceeding to the further rounds.

This is our 2nd challenge of the round 2 and the link is provided below.

Hacker rank link: [www.hackerrank.com/code3000-2-0](https://www.hackerrank.com/code3000-2-0)

Please do not share this link with those who are not qualified.

Think Hard, Code Smart.

Thank You.