## Problem Description Given two numbers nl and n2

- 1. Find prime numbers between n1 and n2, then
- 2. Make all possible unique combinations of numbers from the prime numbers list you found in step 1.
- 3. From this new list again find all prime numbers.
- 4. Find smallest (a) and largest (b) number from the 2nd generated list, also count of this list.
- 5. Consider smallest and largest number as the 1st and 2nd number to generate Fibonacci series respectively till the count (number of primes in the 2nd list).
- 6. Print the last number of a Fibonacci series as an output

## **Constraints**

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2 <= n1, n2 <= 100
n2 - n1 >= 35
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#### Input

2 40

#### **Output**

13158006689

## **Explanation**

1st prime list = [2. 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37]

Combination of all the primes = [23, 25, 27, 32, 35, 37, 52, 53, 57, 72, 73, 75, 112, 113, 115, 117, 132, 133, 135, 137, 172, 173, 175, 177,192, 193, 195, 197, 211, 213, 217, 219, 223, 229, 231, 232, 233, 235, 237, 292, 293, 295, 297, 311, 312, 313, 315, 317, 319, 323, 329, 331, 337, 372, 373, 375, 377, 511, 513, 517, 519, 523, 529, 531, 537, 711, 713, 717, 719, 723, 729, 731, 737, 1113, 1117, 1119, 1123, 1129, 1131, 1137, 1311, 1317, 1319, 1323, 1329, 1331, 1337, 1711, 1713, 1719, 1723, 1729, 1731, 1737, 1911, 1913, 1917, 1923, 1929, 1931, 1937, 2311, 2313, 2317, 2319, 2329, 2331, 2337, 2911, 2913, 2917, 2919, 2923, 2931, 2937, 3111, 3113, 3117, 3119, 3123, 3129, 3137, 3711,3713, 3717, 3719, 3723, 3729, 3731]

2nd prime list = [1193, 3137, 197, 2311, 3719, 73,137, 331, 523. 1931, 719, 337, 211, 23. 1117, 223, 1123, 229, 37, 293, 2917, 1319, 1129, 233, 173, 3119, 113, 53, 373,311, 313, 1913, 1723, 317]

smallest (a) = 23 largest (b) = 3719

Therefore, the last number of a Fibonacci series I.e. 34th Fibonacci number in the series that has 23 and 3719 as the first 2 numbers is 13158006689

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# **Input**

30 70

# **Output**

2027041