### **Question:**

Write a C program to identify "magical numbers" in a given range. A number is considered magical if it satisfies the following two conditions:

1. **First Digit and Sum Condition**:  
   * The first digit of the number must be 1.
   * The square of the sum of its digits must be divisible by 8.
2. **Prime Check Condition**:  
   * The number must also be a prime number.

The program should prompt the user to input two integers representing the lower and upper bounds of the range. For each number in the range, the program should check if the number is magical and print the result for each number.

#### **Input:**

* Two integers low and high representing the range [low, high].

#### **Output:**

* For each number in the range, output whether it is a magical number or not, in the format:  
  + <number> is a magical number.
  + <number> is not a magical number.

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#### **Example:**

Input:

Enter the ranges:

1 10

Output:

1 is not a magical number.

2 is not a magical number.

3 is not a magical number.

4 is not a magical number.

5 is not a magical number.

6 is not a magical number.

7 is not a magical number.

8 is not a magical number.

9 is not a magical number.

10 is not a magical number.

#### **Constraints:**

* Assume that both low and high are positive integers.
* The range should not exceed 1 ≤ low, high ≤ 10,000.