There are positive integers N and M.

A binary string s is called **good** if all of the followings are satisfied:

- is non-empty.
- The number of 1s in s is a multiple of N.
- The number of 0s in s is a multiple of M.

A good string is called **perfect** if it doesn't contain shorter good (contiguous) substrings.

For example, if N=3 and M=2, then strings 111, 00 and 10101 are perfect,

but 0000 and 11001 are not.

One can show that for any N, M the number of perfect strings is finite. Find this number modulo 998244353.

### **Input Format**

Input is given from Standard Input in the following format:

N M

#### **Constraints**

- 1<=N.M<=40
- All values in the input are integers.

### **Output Format**

Print the answer

#### Sample Input 0

22

#### Sample Output 0

4

#### **Explanation 0**

The perfect strings are 00, 0101, 1010, 11.

#### Sample Input 1

32

## **Sample Output 1**

7

## **Explanation 1**

The perfect strings are 00, 01011, 01101, 10101, 10110, 11010, 111.

#### Sample Input 2

# Sample Output 2

212685109