Power - Mod Power *



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So far, we have only heard of Python's powers. Now, we will witness them!

Powers or exponents in Python can be calculated using the built-in power function. Call the power function a^b as shown below:

>>> pow(a,b)

or

>>> a**b

It's also possible to calculate $a^b \mod m$.

>>> pow(a,b,m)

This is very helpful in computations where you have to print the resultant % mod.

Note: Here, \boldsymbol{a} and \boldsymbol{b} can be floats or negatives, but, if a third argument is present, \boldsymbol{b} cannot be negative.

Note: Python has a math module that has its own pow(). It takes two arguments and returns a float. It is uncommon to use math.pow().

Task

You are given three integers: \boldsymbol{a} , \boldsymbol{b} , and \boldsymbol{m} . Print two lines.

On the first line, print the result of pow(a,b). On the second line, print the result of pow(a,b,m).

Input Format

The first line contains ${\pmb a}$, the second line contains ${\pmb b}$, and the third line contains ${\pmb m}$.

Constraints

 $1 \le a \le 10$

 $1 \le b \le 10$

 $2 \le m \le 1000$

Sample Input

3

4

Sample Output

81

1



```
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# Enter your code here. Read input from STDIN. Print output to STDOUT

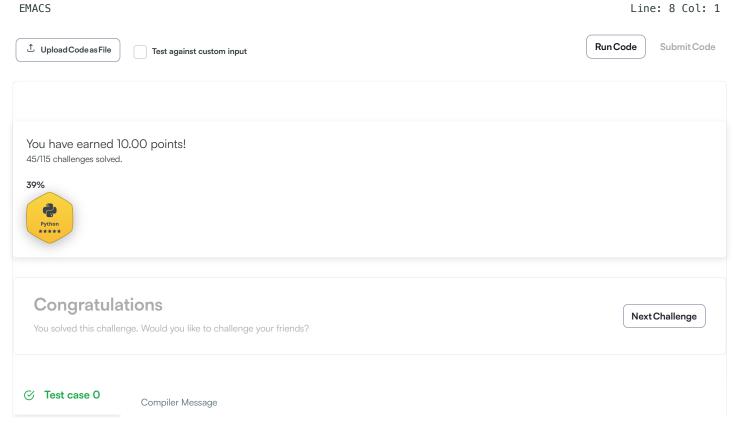
a = int(input())

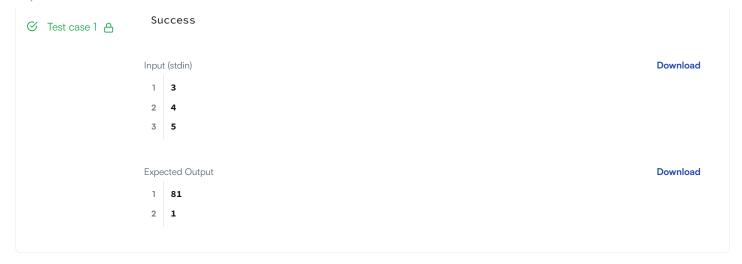
b = int(input())

m = int(input())

print(pow(a, b))

print(pow(a, b, m))
```





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