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Integers Come In All Sizes ☆

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Problem

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Integers in Python can be as big as the bytes in your machine's memory. There is no limit in size as there is: $2^{31} - 1$ (C++ int) or $2^{63} - 1$ (C++ long long int).

As we know, the result of a^b grows really fast with increasing b .

Let's do some calculations on very large integers.

Task

Read four numbers, a , b , c , and d , and print the result of $a^b + c^d$.

Input Format

Integers a , b , c , and d are given on four separate lines, respectively.

Constraints

$$1 \leq a \leq 1000$$

$$1 \leq b \leq 1000$$

$$1 \leq c \leq 1000$$

$$1 \leq d \leq 1000$$

Output Format

Print the result of $a^b + c^d$ on one line.

Sample Input

```
9
29
7
27
```

Sample Output

```
4710194409608608369201743232
```

Note: This result is bigger than $2^{63} - 1$. Hence, it won't fit in the long long int of C++ or a 64-bit integer.

Author

shashank21j

Difficulty

Easy

Max Score

10

Submitted By

45942

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Python 3



```
1 a,b,c,d=int(input()),int(input()),int(input()),int(input())
2 print(a**b+c**d)
```

Line: 2 Col: 16

[Upload Code as File](#) ☐ Test against custom input

Run Code

Submit Code



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Input (stdin)

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9
29
7
27

Expected Output

[Download](#)**4710194409608608369201743232**

Compiler Message

Success