

Integers Come In All Sizes

Problem

Submissions

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.



Contest ends in 1 day 6 hours 52 minutes 55 seconds

Submissions: 1445

Max Score: 50

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Python 3



```
1 a=int(input())
2 b=int(input())
3 c=int(input())
4 d=int(input())
5 print(a ** b + c ** d)
```

Line: 5 Col: 23

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☐ Test against custom input

Run Code

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