Valar Morghulis Question-1



Given ${f a}$ and ${f b}$, find (a^b modulo 100000007).

Input Format

A single line containing **a** and **b** seperated by space.

Constraints

- $1 \le a \le 10^9$
- $0 \le b \le 10^9$

Output Format

A single line denoting the value of (a^b modulo 100000007).

Sample Input 0

2 3

Sample Output 0

8