Task **D1. FISH GLOBE**

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On his birthday, Goshko received from the class-mates an aquarium, containing *K* silvery fishes. After one day, silvery fish become golden. After one more day, each gold fish gives birth to one silver fish. This process is repeated periodically. Help Goshko to monitor the number of fishes in the aquarium without having to count them. Write a program **fishglobe**, which prints the total number of fishes in the aquarium after *N* days.

### Input

On the single line of the standard input, two natural numbers *K* and *N* are written. *K* – the number of silvery fishes and *N -* number of days.

**Output**

The only line of the standard output should contain the total number of fishes in the aquarium after *N* days.

**Restrictions**

2 ≤ *K* ≤ 24

2 ≤ *N* ≤ 65

**Examples**

**Input**

5 7

**Output**

40