Exponentiation

Description

Problems involving the computation of exact values of very large magnitude and precision are common. For example, the computation of the national debt is a taxing experience for many computer systems.

This problem requires that you write a program to compute the exact value of R^n where **R** is a real number (0 < R <= 99.999) and **n** is an integer such that 0 < n <= 1000.

Input

The input contains multiple test cases and terminated by end of file. Each test case contains two numbers R and n in a single line. The R value will occupy columns 1 through 6, followed by a space, then the second value n.
There are at most 30 test cases.

Output

The output will consist of one line for each line of input giving the exact value of R^n. Leading zeros should be suppressed in the output. Insignificant trailing zeros must not be printed. Don't print the decimal point if the result is an integer.

Sample Input

```
8.0000 5
95.123 12
0.4321 20
5.1234 15
6.7592 9
98.999 10
1.0100 12
```

Sample Output

```
32768
548815620517731830194541.899025343415715973535967221869852721
```

.0000000514855464107695612199451127676715483848176020072635120383542976301346240143992025569.928573701266488041146654993318703707511666295476720493953024
29448126.764121021618164430206909037173276672
904290727436295404981.10759601945665177456104401000111.12682503013196972066120