B. Nirvana

time limit per test

1 second

memory limit per test

256 megabytes

input

standard input

output

standard output

Kurt reaches nirvana when he finds the product of all the digits of some positive integer. Greater value of the product makes the nirvana deeper.

Help Kurt find the maximum possible product of digits among all integers from 11 to nn.

**Input**

The only input line contains the integer nn (1≤n≤2⋅1091≤n≤2⋅109).

**Output**

Print the maximum product of digits among all integers from 11 to nn.

**Examples**

**input**

**Copy**

390

**output**

**Copy**

216

**input**

**Copy**

7

**output**

**Copy**

7

**input**

**Copy**

1000000000

**output**

**Copy**

387420489

**Note**

In the first example the maximum product is achieved for 389389 (the product of digits is 3⋅8⋅9=2163⋅8⋅9=216).

In the second example the maximum product is achieved for 77 (the product of digits is 77).

In the third example the maximum product is achieved for 999999999999999999 (the product of digits is 99=38742048999=387420489).