

The Eternal Immortality



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Even if the world is full of counterfeits, I still regard it as wonderful.

Pile up herbs and incense, and arise again from the flames and ashes of its predecessor — as is known to many, the phoenix does it like this.

The phoenix has a rather long lifespan, and reincarnates itself once every $a!$ years. Here $a!$ denotes the factorial of integer a , that is, $a! = 1 \times 2 \times \dots \times a$. Specifically, $0! = 1$.

Koyomi doesn't care much about this, but before he gets into another mess with oddities, he is interested in the number of times the phoenix will reincarnate in a timespan of $b!$ years, that is, $\frac{b!}{a!}$. Note that when $b \geq a$ this value is always integer.

As the answer can be quite large, it would be enough for Koyomi just to know **the last digit of the answer in decimal representation**. And you're here to provide Koyomi with this knowledge.

Input

The first and only line of input contains two space-separated integers a and b ($0 \leq a \leq b \leq 10^{18}$).

Output

Output one line containing a single decimal digit — the last digit of the value that interests Koyomi.

Examples

Input:

2 4

Output:

2

Input:

0 10

Output:

0

Input:

107 109

Output:

2

Note

In the first example, the last digit of $4!_{/2!} = 12$ is 2;

In the second example, the last digit of $10!_{/0!} = 3628800$ is 0;

In the third example, the last digit of $109!_{/107!} = 11772$ is 2.