

## 10219 Find the ways!

An American, a Frenchman and an Englishwoman had been to Dhaka, the capital of Bangladesh. They went sight-seeing in a taxi. The three tourists were talking about the sites in the city. The American was very proud of tall buildings in New York. He boasted to his friends, “*Do you know that the Empire State Building was built in three months?*”.

“*Really?*” replied the Frenchman. “*The Eiffel Tower in Paris was built in only one month!*” (However, The truth is, the construction of the Tower began in January 1887. Forty Engineers and designers under Eiffel’s direction worked for two years. The tower was completed in March 1889.)

“*How interesting!*” said the Englishwoman. “*Buckingham Palace in London was built in only two weeks!!*”.

At that moment the taxi passed a big slum (However, in Bangladesh we call it “*Bostii*”). “*What was that? When it was built?*” The Englishwomen asked the driver who was a Bangladeshi.

“*I don’t know!*”, answered the driver. “*It wasn’t there yesterday!*”.

However in Bangladesh, illegal establishment of slums is a big time problem. Government is trying to destroy these slums and remove the peoples living there to a far place, formally in a planned village outside the city. But they can’t find any ways, how to destroy all these slums!

Now, can you imagine yourself as a slum destroyer? In how many ways you can destroy  $k$  slums out of  $n$  slums! Suppose there are 10 slums and you are given the permission of destroying 5 slums, surly you can do it in 252 ways, which is only a 3 digit number, Your task is to find out the digits in ways you can destroy the slums!

### Input

The input file will contain one or more test cases.

Each test case consists of one line containing two integers  $n$  ( $n \geq 1$ ) and  $k$  ( $1 \leq k \leq n$ ).

### Output

For each test case, print one line containing the required number. This number will always fit into an integer, i.e. it will be less than  $2^{31} - 1$ .

### Sample Input

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20 5
100 10
200 15
```

### Sample Output

```
5
14
23
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