Code: FACT Problem 6 Score: 100

What The Factorial ?

Problem :

Hardik loves the mathematical function "Factorial". As you know, factorial of a number 'n' is defined as :

$$f(n) = n!, \text{ where } n! = 1.2.3.....n$$

But writing factorial of big numbers is a menace for him, so he represents the factorial as $n! = x * 10^k$ where x is a natural number such that $x \% 10 \neq 0$.

You are supposed to find the last three digits of x.

Note : $x * 10^k$ doesn't represent the scientific notation.

Input :

The input will include different values of n corresponding to number of test cases.

Output :

You are supposed to display the last three 'non-zero' digits of the factorial of n.

Sample :

Input :

13

Output :

208

Explanation :

Since 13! = 6227020800

Hence, required value of 208.

Scoring :

There are 4 test cases, each carrying 25 marks.