

1. Take a number n as input and find $n!$
2. Take two integers x , y as input.
 - a. print “ x is divisible by y ” as output if that holds. Otherwise print “ x is not divisible by y ”.
[Recall that you can use the $\%$ operator to get the remainder when one number is divided by another. In particular, $n\%d$ evaluates to the remainder when n is divided by d . For example $8\%3$ is 2 because if you divide 8 by 3, you get a remainder of 2.]
 - b. Check whether $x = y^n$ where n is a natural number and $2 < n < 15$. If $x = y^n$, then print n . Otherwise print “could not find n ”.

Input : 64 4

Output: 3

3.
 - a. Take a number n as input and print the number of digits.
 - b. Check whether a number is an Armstrong number or not.
[An Armstrong number is an n -digit number that is equal to the sum of the n th powers of its digits. For Example:
$$407 = 4^3 + 0^3 + 7^3 = 64 + 0 + 343 = 407$$
]

[Here assume that the user will always give a 3 digit number as input.]

4. Write a c code to swap the last and second last digit of a number.
5. Write a c code to print the n th Fibonacci number.