Numeral Static Methods

For this program you will write several methods for a class named Numeral.

The names of the methods you must write are below. A brief description of each method is given.

1. showDivisors

   This method accepts a single integer parameter and returns the proper divisors (divisors less than the parameter) of the parameter.
   For instance, if 12 is input, the method prints 1, 2, 3, 4, 6.

2. isPrime

   This method accepts a single parameter and prints if a number is prime. For instance, if 7 is passed as a parameter the method should print "7 is a prime number". If the parameter passed is 12 the method should print "12 is not a prime number". If a negative value is passed, the positive value should be considered. That is, if -12 is passed as a parameter, the method should print "-12 is not prime".

3. factorial

   This method accepts a single parameter and prints the product of positive integers less than or equal to the parameter. For instance, for the parameter 4, your method should print **4! = 4 x 3 x 2 x 1 = 24.**
   For 1, your method should print 1! = 1.
   For 0, your method should print 0! = 1.

   For negative integers, your method should print -1.
   For instance, for -12, your method should print -12! = -1

4. contains

   This method accepts two integer parameters. The first parameter is the integer to be searched. The second parameter is a single digit (0 – 9). The method returns the location of (in base 10 for each occurrence of the target).

   For instance, if contains(313403, 3) is called, the method should return the following:

   1
   1000
   100000

   to indicate a 3 is found in the ones, thousands, and hundred-thousands place.