16 Emirp numbers
7 points

Introduction
A prime is a number that is only divisible by one and itself, which is essentially saying that it has no divisor. Nowadays primes are essential for secure communications. Most modern computer cryptography works by using the prime factors of large numbers.

When you reverse the digits of most primes you get a composite number (for example, 43 becomes 34). That is not the case for palindromic primes that read the same forward and backward (for example, 727), so reversing a palindromic prime gives you the same prime.

Then there is an special category, the emirp numbers. An emirp (the word "prime" written backwards) is a prime whose reversal is also prime, but which is not a palindromic prime (for example, 13 becomes 31). The first emirp numbers are 13, 17, 31, 37, 71, 73, 79, 97, 107, 113, 149, 157, ...

Let's write a program to find out whether an integer number is emirp.

Input
The input will be an integer number.

Output
Print out whether the given numer is emirp or not.

Example 1

Input
13

Output
13 is an emirp number

Example 2

Input
11

Output
11 is not an emirp number