Prime or not:

A prime number is a natural number greater than 1 that has no positive divisors other than 1 and itself. Therefore, if a number does not have any devisers in the range of 2 and the number itself, it is a prime number.

In this program we ask the user to input an integer and we receive this value into the variable “number”. We know that “being a prime number” is a concept particular to positive integers.

So, we must add the condition for the number to be greater than 1.

Now we should check if the input number is divisible by any number other than 1 and itself. For this, we use a for loop.

Then we use the modulus (mod) operator to check the divisibility; because mod is an operator that divides the variable by the numbers in our range and calculates the remainder. So, if (number % i) is equal to zero for any i in the range (2, number) it means that it was divisible by one of the numbers in the range and therefore, is not prime.

Otherwise, it is prime.

Finally, the program will display whether or not the input number is prime based on the result of the if condition.