

Prime Numbers

A prime number is a number (not including 1) that is only evenly divisible by two numbers: itself and 1. For example, the number 5 is prime because it can only be evenly divided by 1 and 5. The number 6, however, is not prime because it can be divided evenly by 1, 2, 3, and 6. Starting from the provided template file, write a Boolean function named `is_prime` which takes an integer as an argument and returns `True` if the argument is a prime number, or `False` otherwise. Then, in the main function, prompt the user to enter a number, and then use your `is_prime` to display a message indicating whether the number is prime or not.

Input	Output
Number	Status
1	not prime
2	prime
10	not prime
3001	prime
-1	quit

Table 1: Test data for Exercise 16.

Test your program with the data in Table 1. Finally, format your program to match the sample output, character for character, including all white space and punctuation. User input in the sample has been highlighted in **Pappy's Purple** to distinguish it from the program's output, but your user input does not need to be colored. Save your program as `prime_numbers.py` and submit it along with a screenshot showing a run of **all 5** test cases.

Terminal

```
$ python prime_numbers.py
Enter a positive integer (-1 to quit): 1
1 is not a prime number.
Enter a positive integer (-1 to quit): 2
2 is a prime number.
Enter a positive integer (-1 to quit): 10
10 is not a prime number.
Enter a positive integer (-1 to quit): 3001
3001 is a prime number.
Enter a positive integer (-1 to quit): -1
$
```