Metropolitan State University, Saint Paul, Minnesota

ICS 140 Computational Thinking with Programming

Assignment 8

For the problem below, complete the following steps:

* Create test cases with expected results based on example input
* Create Python Code
* Show Test Results

**Prime Numbers**

A prime number is a number that is only evenly divisible by itself and 1. For example, the number 7 is prime because it can only be evenly divided by 1 and 7. The number 8, however is not a prime number because it can be divided by 1, 2, 4, and 8.

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. Use the function in a program that prompts the user to enter a number then displays a message indicating whether the number is prime.

**Test Case 1**

**Example Input**

26577

**Expected Result:**

False

**Actual Result**

A screenshot of a computer

Description automatically generated

**Test Case 2**

**Example Input**

174440041

**Expected Result:**

True

**Actual Result**

A computer screen shot of a program code

Description automatically generated

A computer screen shot of a code

Description automatically generated