My design

For the linear function I just used the built in min() function of python.

For the O(n^2) function I created a function called squared that took in a list.

It then creates a variable called minimum that holds the first spot of the list.

It then loops through the list.

And has another loop inside the loop.

Which compares if the number from the first loop is smaller than the number of the second loop and if the number from the first loop is smaller than the number from the minimum variable.

If it is then it stores the first number in the minimum variable and continues through the loop until it has checked all numbers against each other.

Then it returns the minimum value.

Test Plan

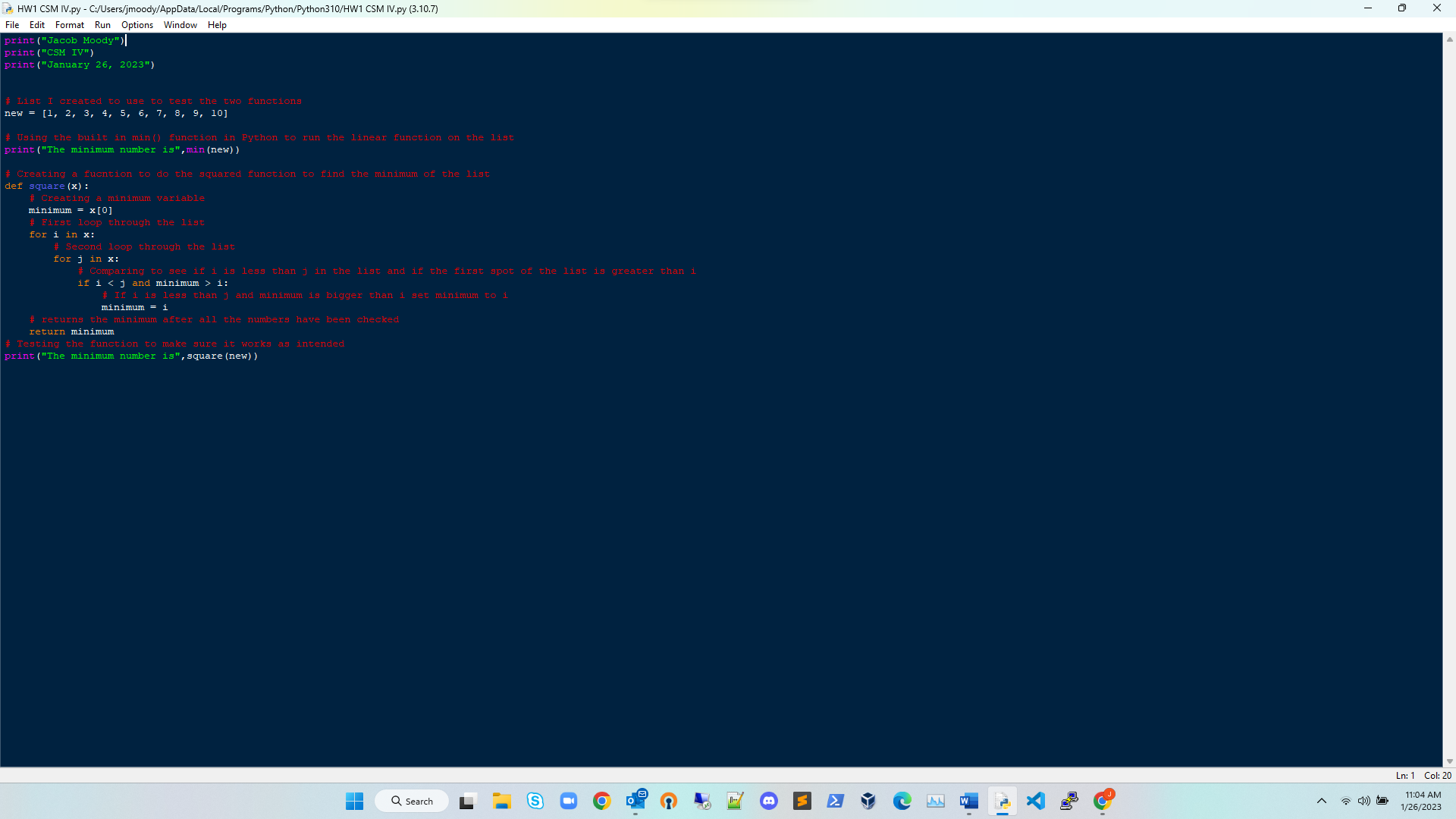
For the min() function I have a print statement that returns a value

So, my example is [1, 2, 3, 4, 5, 6, 7, 8, 9, 10] that list is ran through the min() function and it returns 1

This is what it is supposed to do so it passes the test.

For the square function it is given the same list and it returns 1 as well.

This is what it is supposed to do so it passes the test.



Graphical user interface

Description automatically generated