Objectives:

* Using the while and for loops
* **There are 5 challenge exercises, each worth 20%**

Please submit this document for grading when completed… Please work in-groups.

This lab class exercise is based on Chapter 4 Loops.

**Project #1** (using the for loop and getting the square root)

Text

Description automatically generated

**Project #2** (using the for loop, and getting the sum of numbers)

Text

Description automatically generated

**Challenge exercise #1:** continuing with project #2, get the average of the 5 numbers also.

**#1 print screen the output with code below here.**

**Text

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**Project #3:** Retail validation program using the while loop

**Text

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Validating the entry of the wholesale cost, see blue arrow bottom.

**Text

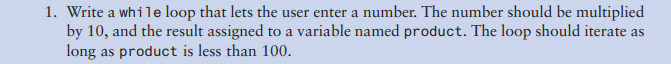
Description automatically generated**

**Project #4:** Property Taxes, using the while loop

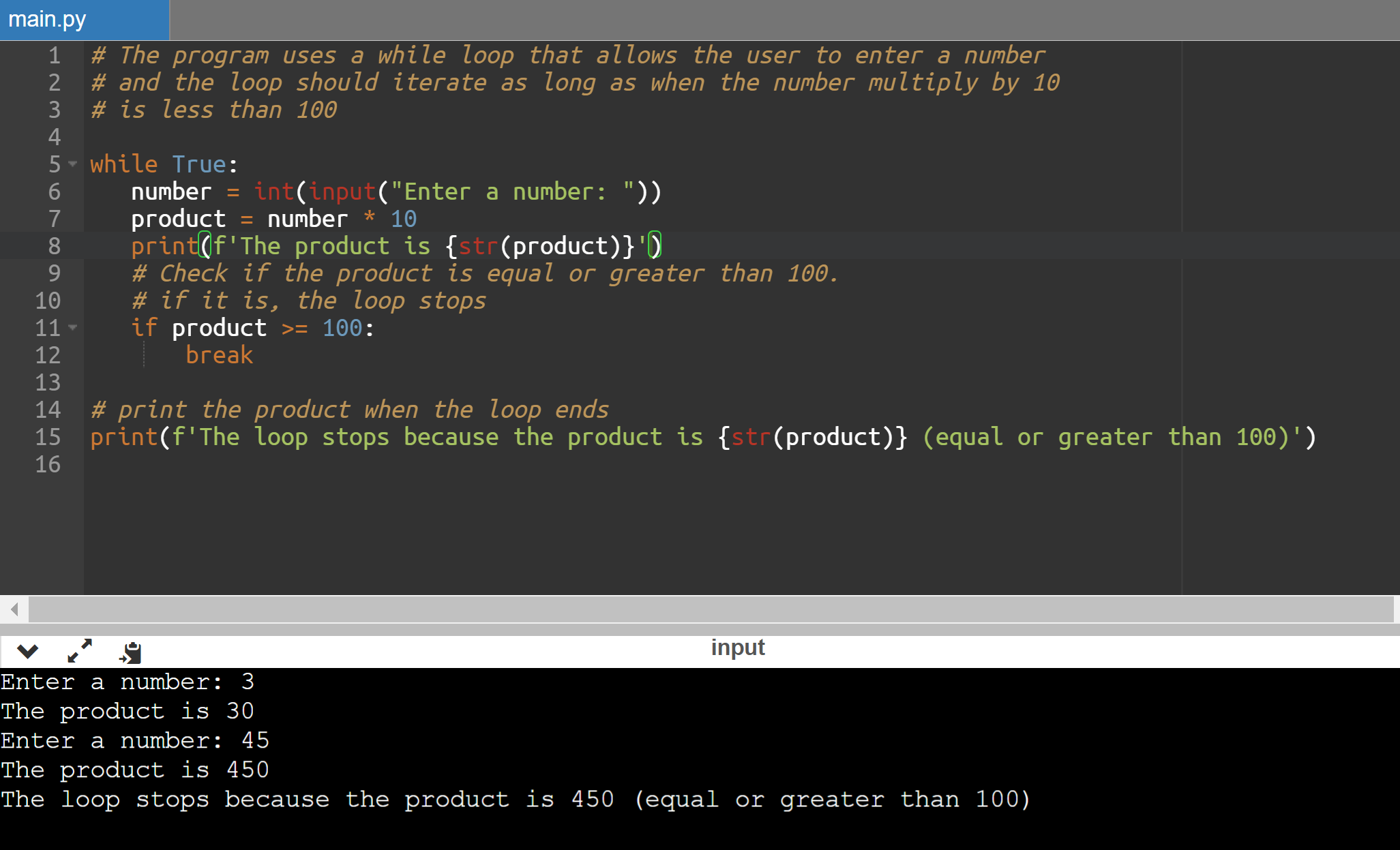
Text

Description automatically generated

**Challenge Exercise #2: complete the following program below:**

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**#2 print screen the output with code below here.**

****

**Challenge Exercise #3: complete the following program below:**

**Text

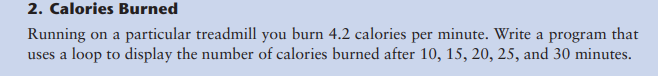
Description automatically generated**

**#3 print screen the output with code below here.**

**Text

Description automatically generated**

**Challenge Exercise #4: complete the following program below:**

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**#4 print screen the output with code below here.**

**Text

Description automatically generated**

**Challenge Exercise #5: complete the following program below:**

**Text

Description automatically generated**

**#5 print screen the output with code below here.**

**Code:**

# Declaration

total = 0.0

laptimeArray = []

# Get number of laps

laps = int(input('Enter number of laps: '))

# Repeat for each lap

for lap in range(laps):

lap\_time = float(input(f'Enter lap time of lap {lap + 1}: '))

laptimeArray.append(lap\_time)

total += lap\_time

fastest = min(laptimeArray)

print('\nFastest Lap Time: ', fastest)

slowest = max(laptimeArray)

print('Slowest Lap Time: ', slowest)

print('Average Lap Time: ', round(total / laps, 2))

**Text

Description automatically generated**

**Screen output**

**Shape, rectangle

Description automatically generated**

**Submit this document to module 3 class exercise.**