OOP1 Lab 6 – Functions

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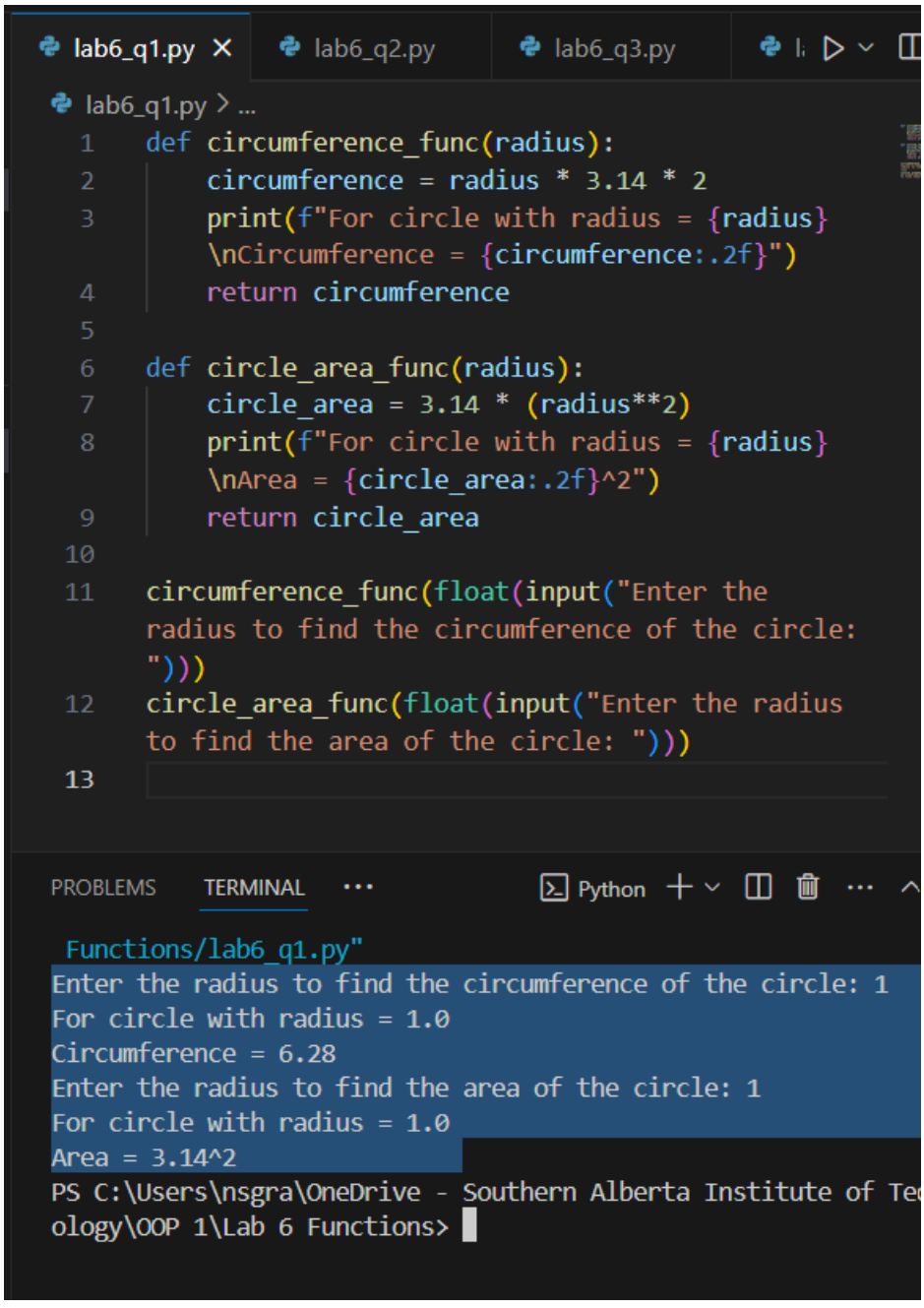
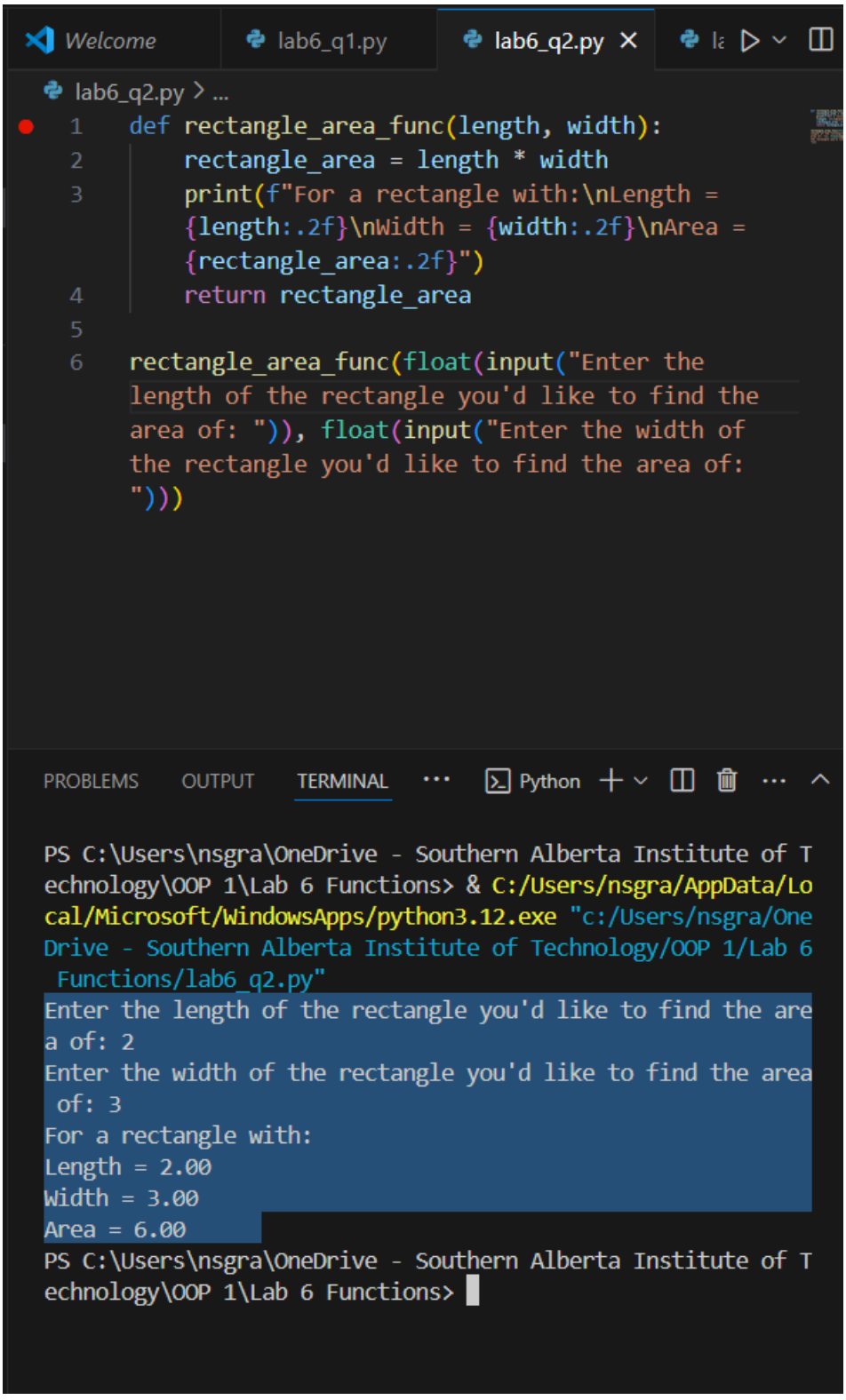
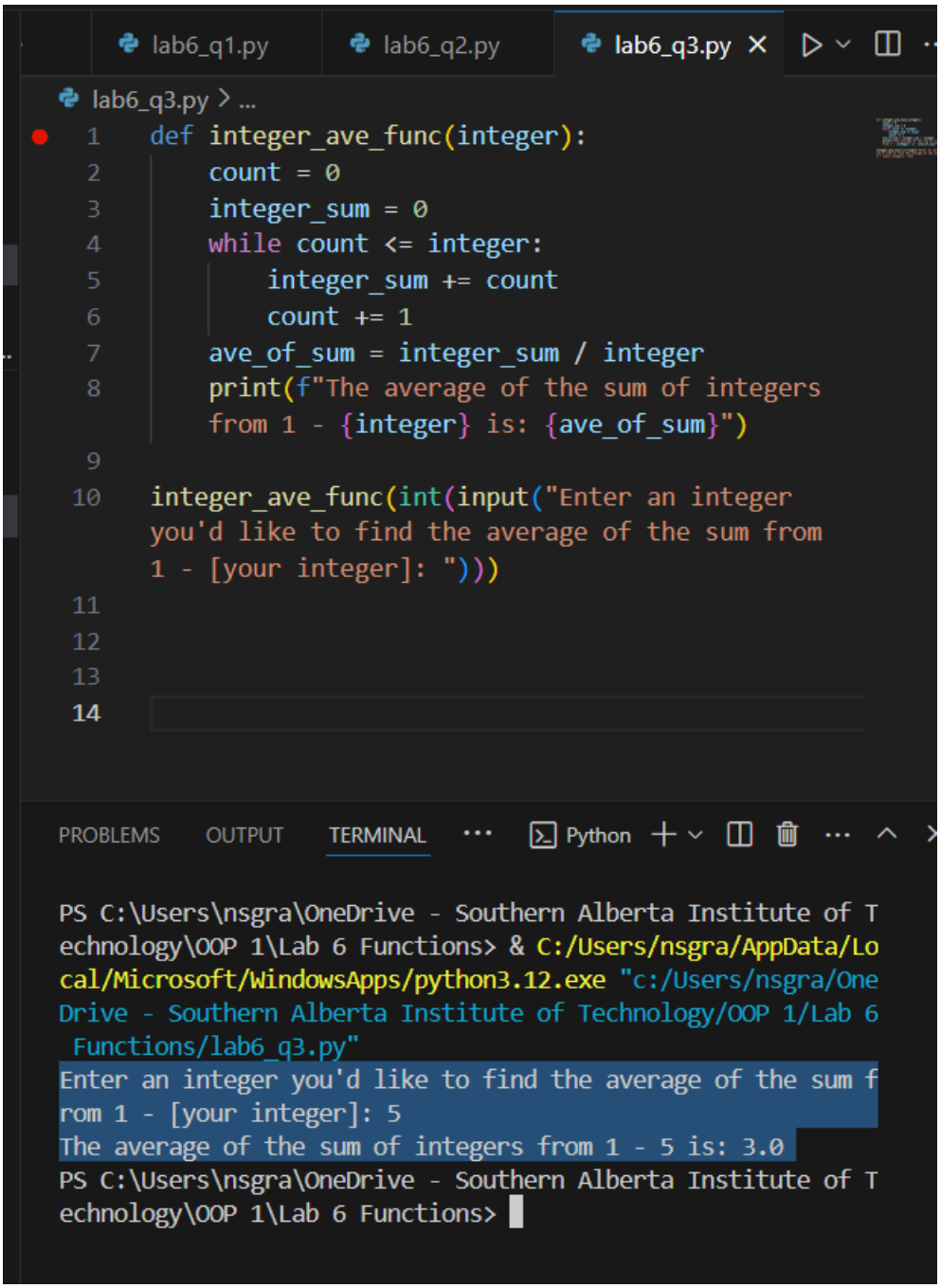
1)



2)


Welcome
lab6_q1.py
lab6_q2.py
lab6_q2.py > ...
1 def rectangle_area_func(length, width):
2 rectangle_area = length * width
3 print(f"For a rectangle with:\nLength = {length:.2f}\nWidth = {width:.2f}\nArea = {rectangle_area:.2f}")
4 return rectangle_area
5
6 rectangle_area_func(float(input("Enter the length of the rectangle you'd like to find the area of: ")), float(input("Enter the width of the rectangle you'd like to find the area of: ")))
PROBLEMS
OUTPUT
TERMINAL
Python
PS C:\Users\nsgra\OneDrive - Southern Alberta Institute of Technology\OOP 1\Lab 6 Functions> & C:/Users/nsgra/AppData/Local/Microsoft/WindowsApps/python3.12.exe "c:/Users/nsgra/OneDrive - Southern Alberta Institute of Technology/OOP 1/Lab 6 Functions/lab6_q2.py"
Enter the length of the rectangle you'd like to find the area of: 2
Enter the width of the rectangle you'd like to find the area of: 3
For a rectangle with:
Length = 2.00
Width = 3.00
Area = 6.00
PS C:\Users\nsgra\OneDrive - Southern Alberta Institute of Technology\OOP 1\Lab 6 Functions>

3)


lab6_q1.py
lab6_q2.py
lab6_q3.py
lab6_q3.py > ...
1 def integer_ave_func(integer):
2 count = 0
3 integer_sum = 0
4 while count <= integer:
5 integer_sum += count
6 count += 1
7 ave_of_sum = integer_sum / integer
8 print(f"The average of the sum of integers from 1 - {integer} is: {ave_of_sum}")
9
10 integer_ave_func(int(input("Enter an integer you'd like to find the average of the sum from 1 - [your integer]: ")))
11
12
13
14
PROBLEMS
OUTPUT
TERMINAL
Python
PS C:\Users\nsgra\OneDrive - Southern Alberta Institute of Technology\OOP 1\Lab 6 Functions> & C:/Users/nsgra/AppData/Local/Microsoft/WindowsApps/python3.12.exe "c:/Users/nsgra/OneDrive - Southern Alberta Institute of Technology/OOP 1/Lab 6 Functions/lab6_q3.py"
Enter an integer you'd like to find the average of the sum from 1 - [your integer]: 5
The average of the sum of integers from 1 - 5 is: 3.0
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4)

lab6_q4.py > ...

```python

def add(num1, num2):
    return num1 + num2
def subtract(num1, num2):
    return num1 - num2
def multiply(num1, num2):
    return num1 * num2
def divide(num1, num2):
    return num1 / num2

operation = input("Enter the operation (add, subtract, multiply, divide) you'd like to perform: ")

if operation == "add":
    num1 = float(input("Enter your first number: "))
    num2 = float(input("Enter your second number: "))
    print(f"{num1} + {num2} = {add(num1, num2)}")
elif operation == "subtract":
    num1 = float(input("Enter your first number: "))
    num2 = float(input("Enter your second number: "))
    print(f"{num1} - {num2} = {subtract(num1, num2)}")
elif operation == "multiply":
    num1 = float(input("Enter your first number: "))
    num2 = float(input("Enter your second number: "))
    print(f"{num1} * {num2} = {multiply(num1, num2)}")
elif operation == "divide":
    num1 = float(input("Enter your first number: "))
    num2 = float(input("Enter your second number: "))
    print(f"{num1} / {num2} = {divide(num1, num2)}")
else:
    print("Invalid operation input")

```

```
PS C:\Users\nsgra\OneDrive - Southern Alberta Institute of Technology\OOP 1\Lab 6 Functions
nsgra/OneDrive - Southern Alberta Institute of Technology/OOP 1/Lab 6 Functions/lab6_q4.py'
Enter the operation (add, subtract, multiply, divide) you'd like to perform: add
Enter your first number: 2
Enter your second number: 3
2.0 + 3.0 = 5.0
PS C:\Users\nsgra\OneDrive - Southern Alberta Institute of Technology\OOP 1\Lab 6 Functions
nsgra/OneDrive - Southern Alberta Institute of Technology/OOP 1/Lab 6 Functions/lab6_q4.py'
Enter the operation (add, subtract, multiply, divide) you'd like to perform: subtract
Enter your first number: 5
Enter your second number: 4
5.0 - 4.0 = 1.0
PS C:\Users\nsgra\OneDrive - Southern Alberta Institute of Technology\OOP 1\Lab 6 Functions
nsgra/OneDrive - Southern Alberta Institute of Technology/OOP 1/Lab 6 Functions/lab6_q4.py'
Enter the operation (add, subtract, multiply, divide) you'd like to perform: multiply
Enter your first number: 2
Enter your second number: 5
2.0 * 5.0 = 10.0
PS C:\Users\nsgra\OneDrive - Southern Alberta Institute of Technology\OOP 1\Lab 6 Functions
nsgra/OneDrive - Southern Alberta Institute of Technology/OOP 1/Lab 6 Functions/lab6_q4.py'
Enter the operation (add, subtract, multiply, divide) you'd like to perform: divide
Enter your first number: 12
Enter your second number: 4
12.0 / 4.0 = 3.0
PS C:\Users\nsgra\OneDrive - Southern Alberta Institute of Technology\OOP 1\Lab 6 Functions
```