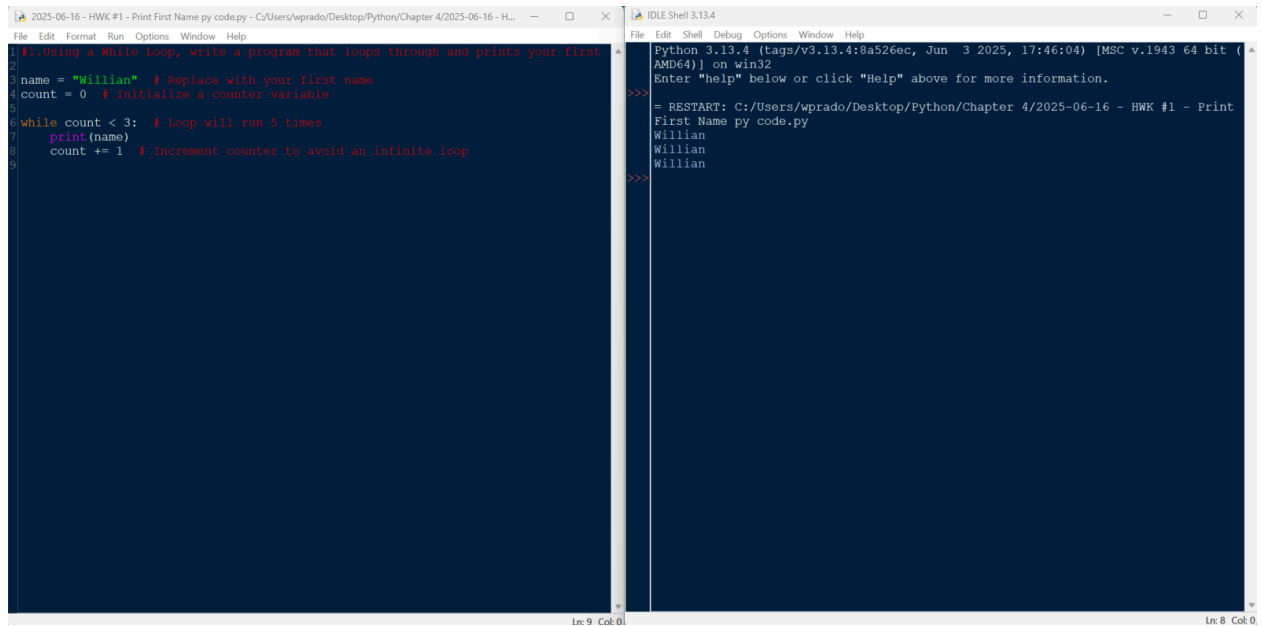


Chapter 4 Homework

#1



The screenshot shows two windows from a Python IDE. The left window is a code editor titled '2025-06-16 - HWK #1 - Print First Name py code.py'. It contains the following Python code:

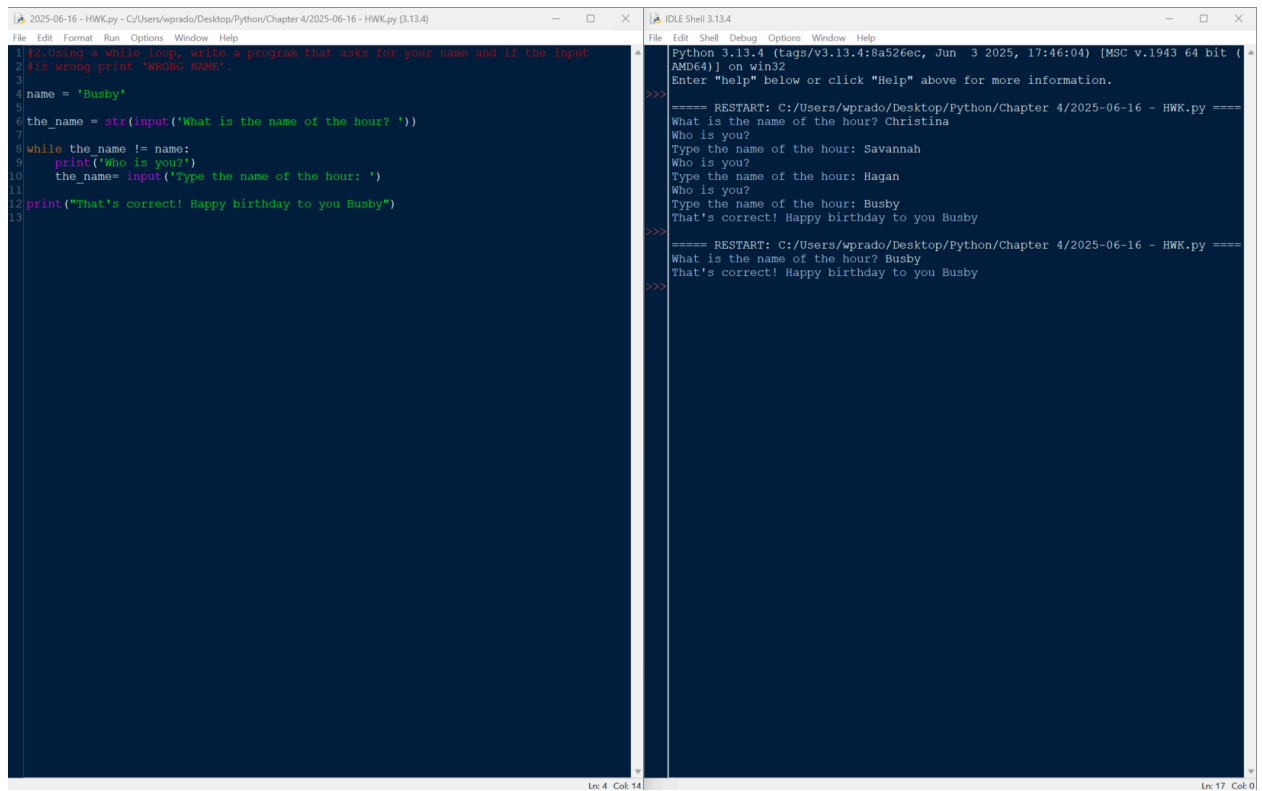
```
1 #1.Using a while loop, write a program that loops through and prints your first
2
3 name = "Willian" # Replace with your first name
4 count = 0 # Initialize a counter variable
5
6 while count < 3: # Loop will run 5 times
7     print(name)
8     count += 1 # Increment counter to avoid an infinite loop
9
```

The right window is the IDLE Shell titled 'IDLE Shell 3.13.4'. It shows the output of the program:

```
Python 3.13.4 (tags/v3.13.4:8a526ec, Jun 3 2025, 17:46:04) [MSC v.1943 64 bit (
AMD64)] on win32
Enter "help" below or click "Help" above for more information.
>>>
= RESTART: C:/Users/wprado/Desktop/Python/Chapter 4/2025-06-16 - HWK #1 - Print
First Name py code.py
Willian
Willian
Willian
>>>
```

At the bottom of the windows, the cursor positions are indicated: 'Ln: 9 Col: 0' for the code editor and 'Ln: 8 Col: 0' for the shell.

#2



The screenshot shows two windows from a Python IDE. The left window is a code editor titled '2025-06-16 - HWK.py - C:/Users/wprado/Desktop/Python/Chapter 4/2025-06-16 - HWK.py (3.13.4)'. It contains the following Python code:

```
1 #2.Using a while loop, write a program that asks for your name and if the input
2 #is wrong print 'WRONG NAME'.
3
4 name = 'Busby'
5
6 the_name = str(input('What is the name of the hour? '))
7
8 while the_name != name:
9     print('Who is you?')
10    the_name= input('Type the name of the hour: ')
11
12 print("That's correct! Happy birthday to you Busby")
13
```

The right window is the IDLE Shell titled 'IDLE Shell 3.13.4'. It shows the output of the program:

```
Python 3.13.4 (tags/v3.13.4:8a526ec, Jun 3 2025, 17:46:04) [MSC v.1943 64 bit (
AMD64)] on win32
Enter "help" below or click "Help" above for more information.
>>>
===== RESTART: C:/Users/wprado/Desktop/Python/Chapter 4/2025-06-16 - HWK.py =====
What is the name of the hour? Christina
Who is you?
Type the name of the hour: Savannah
Who is you?
Type the name of the hour: Hagan
Who is you?
Type the name of the hour: Busby
That's correct! Happy birthday to you Busby
>>>
===== RESTART: C:/Users/wprado/Desktop/Python/Chapter 4/2025-06-16 - HWK.py =====
What is the name of the hour? Busby
That's correct! Happy birthday to you Busby
>>>
```

At the bottom of the windows, the cursor positions are indicated: 'Ln: 4 Col: 14' for the code editor and 'Ln: 17 Col: 0' for the shell.

#3

```
2025-06-16 - HWK #1 - Infinite Loop py code.py - C:/Users/wprado/Desktop/Python/Chapter 4/2025-06-16 - HWK...
File Edit Format Run Options Window Help
1 #1 Using a while loop, create an infinite loop. (Remember to stop the program
2 #after you run it for a few seconds) hint: ctrl-C
3 #Example: true = 'y'
4 #While...
5
6 name = input('What is your name? ')
7
8 set_name = ("My name is Bill")
9
10 while name != set_name:
11     print('Wrong name, try again!')
12     name = input('What is your name?')
13
14 print("That's Correct!")
15
```

```
Python 3.13.4 (tags/v3.13.4:8a526ec, Jun 3 2025, 17:46:04) [MSC v.1943 64 Bit
AMD64] on win32
Enter "help" below or click "Help" above for more information.
>>>
= RESTART: C:/Users/wprado/Desktop/Python/Chapter 4/2025-06-16 - HWK #1 - Infinit
to Loop py code.py
What is your name? Bill
Wrong name, try again!
What is your name? billy
Wrong name, try again!
What is your name? Will
Wrong name, try again!
What is your name? bill
Wrong name, try again!
What is your name? Bill
Wrong name, try again!
What is your name? Billy
Wrong name, try again!
What is your name?
```

#4.

```
2025-06-16 - HWK #4.py - C:/Users/wprado/Desktop/Python/Chapter 4/2025-06-16 - HWK #4.py (3.13.4)
File Edit Format Run Options Window Help
1 #Chapter 4
2 #4. Samantha owns an import business, and she calculates the retail prices of
3 #her products with the following formula:
4 #retail price = wholesale cost x 2.5
5 #write a program that calculates retail price of a product. pseudo code:
6 #1) define markup percentage
7 #2) prime the pump
8 #3) get the item's wholesale price
9 #4) calculate retail price
10 #5) display retail price
11 #6) no more products
12
13 markup = 2.5
14 x = 1 #number of products you have
15 products = int(input("How many products do you have? "))
16 while x <= products: # x is less than or equal to the number of products
17     wholesale price = float(input(f"what is the wholesale price of product {x}? "))
18     retail_price = wholesale price * markup #markup is already defined; use what
19     print(f"The retail price is: ${retail_price}") # code to find the retail p
20     x = x + 1 # indicate when the loop will stop
21
```

```
Python 3.13.4 (tags/v3.13.4:8a526ec, Jun 3 2025, 17:46:04) [MSC v.1943 64 Bit
AMD64] on win32
Enter "help" below or click "Help" above for more information.
>>>
=== RESTART: C:/Users/wprado/Desktop/Python/Chapter 4/2025-06-16 - HWK #4.py ===
How many products do you have? 8
What is the wholesale price of product 1? 25
The retail price is: $62.5
What is the wholesale price of product 2? 50
The retail price is: $125.0
What is the wholesale price of product 3? 75
The retail price is: $187.5
What is the wholesale price of product 4? 100
The retail price is: $250.0
What is the wholesale price of product 5? 125
The retail price is: $312.5
What is the wholesale price of product 6? 150
The retail price is: $375.0
What is the wholesale price of product 7? 175
The retail price is: $437.5
What is the wholesale price of product 8? 200
The retail price is: $500.0
>>>
```