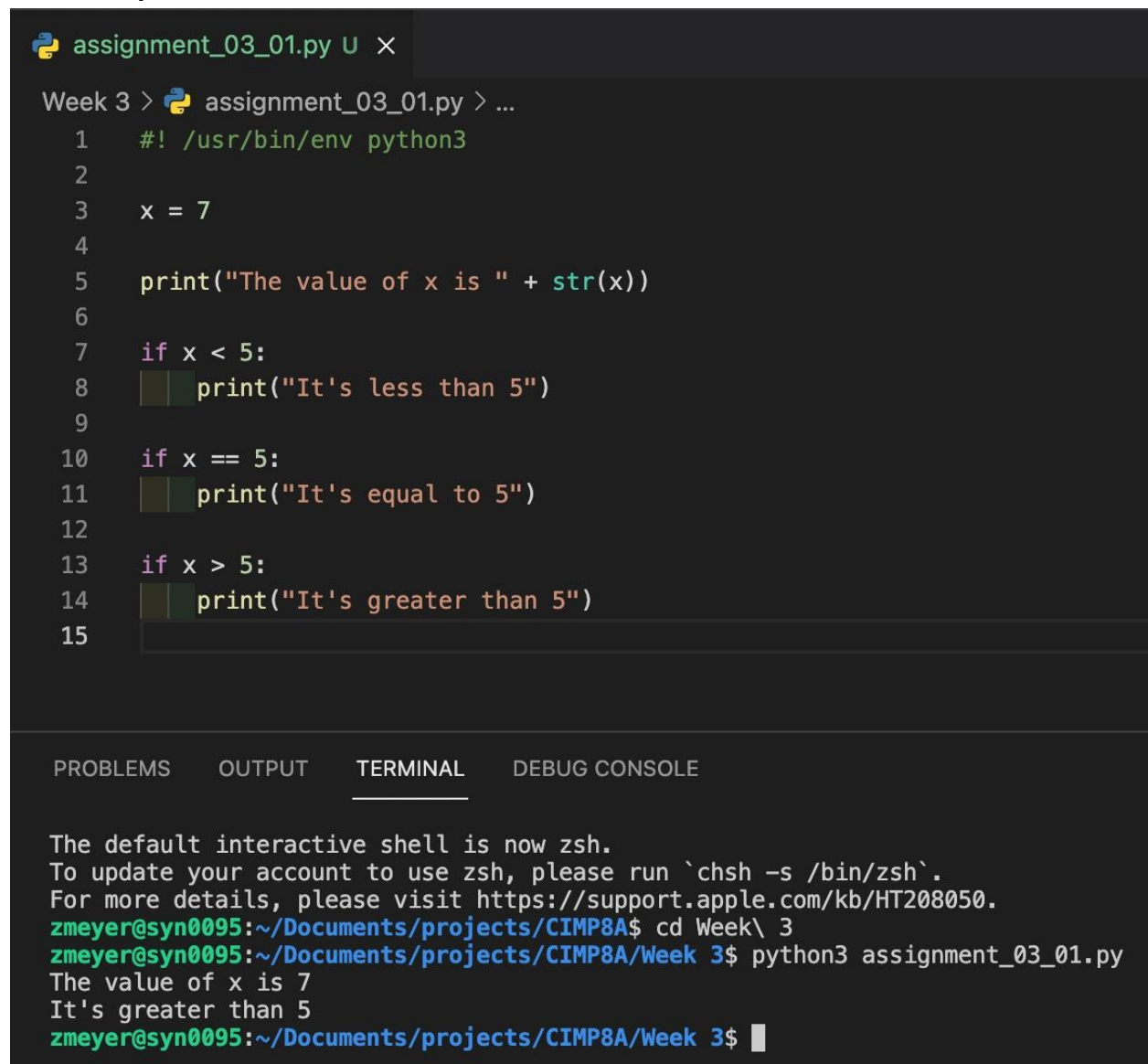


## Screen Capture #1



The screenshot shows a code editor window titled "assignment\_03\_01.py" with a Python icon. The code is a script that prints the value of x and then checks if x is less than, equal to, or greater than 5. Below the code editor is a terminal window with tabs for "PROBLEMS", "OUTPUT", "TERMINAL", and "DEBUG CONSOLE". The terminal shows the execution of the script, which outputs "The value of x is 7" and "It's greater than 5".

```
Week 3 > assignment_03_01.py > ...
1  #!/usr/bin/env python3
2
3  x = 7
4
5  print("The value of x is " + str(x))
6
7  if x < 5:
8      print("It's less than 5")
9
10 if x == 5:
11     print("It's equal to 5")
12
13 if x > 5:
14     print("It's greater than 5")
15
```

PROBLEMS   OUTPUT   TERMINAL   DEBUG CONSOLE

The default interactive shell is now zsh.  
To update your account to use zsh, please run `chsh -s /bin/zsh`.  
For more details, please visit <https://support.apple.com/kb/HT208050>.  
zmeyer@syn0095:~/Documents/projects/CIMP8A\$ cd Week\ 3  
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3\$ python3 assignment\_03\_01.py  
The value of x is 7  
It's greater than 5  
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3\$

## Screen Capture #2

```
1  #!/usr/bin/env python3
2
3  x = 7
4
5  print("The value of x is " + str(x))
6
7  if x < 5:
8      print("It's less than 5")
9  else:
10     print("It's not less than 5")
11
```

PROBLEMS   OUTPUT   TERMINAL   DEBUG CONSOLE

zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3\$ python3 assignment\_03\_01.py  
The value of x is 7  
It's not less than 5  
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3\$

## Screen Capture #3

```
1  #!/usr/bin/env python3
2
3  x = 2
4
5  print("The value of x is " + str(x))
6
7  if x < 5:
8      print("It's less than 5")
9  else:
10     print("It's not less than 5")
11
```

Terminal (^`)

PROBLEMS   OUTPUT   TERMINAL   DEBUG CONSOLE

zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3\$ python3 assignment\_03\_01.py  
The value of x is 2  
It's less than 5  
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3\$

#### Screen Capture #4

```
1  #!/usr/bin/env python3
2
3  x = 5
4
5  print("The value of x is " + str(x))
6
7  if x < 5:
8      print("It's less than 5")
9  elif x == 5:
10     print("It's equal to 5")
11 else:
12     print("It's not less than 5")
13
```

PROBLEMS   OUTPUT   TERMINAL   DEBUG CONSOLE

```
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$ python3 assignment_03_01.py
The value of x is 5
It's equal to 5
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$
```

#### Screen Capture #5

```
1  #!/usr/bin/env python3
2
3  x = 7
4
5  print("The value of x is " + str(x))
6
7  if x != 5:
8      print("It's NOT equal to 5")
9  else:
10     💡 print("It's equal to 5")
11
```

PROBLEMS   OUTPUT   TERMINAL   DEBUG CONSOLE

```
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$ python3 assignment_03_01.py
The value of x is 7
It's NOT equal to 5
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$
```

## Screen Capture #6

```
1  #!/usr/bin/env python3
2
3  units = 14
4  gpa = 3.75
5
6  if units >= 12 and gpa >= 3.25:
7      print("Eligible for Dean's List")
8  else:
9      print("Not eligible for Dean's List")
10
```

PROBLEMS    OUTPUT    TERMINAL    DEBUG CONSOLE

```
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$ python3 assignment_03_02.py
Eligible for Dean's List
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$
```

## Screen Capture #7

```
1  #!/usr/bin/env python3
2
3  iPhone = "x" # make sure you use a lower case x here
4
5  if iPhone == "10" or iPhone == "x": # use lower case X here
6      print("The iPhone is the latest")
7  else:
8      print("The iPhone is not the latest")
9
```

PROBLEMS    OUTPUT    TERMINAL    DEBUG CONSOLE

```
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$ python3 assignment_03_02.py
The iPhone is the latest
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$
```

## Screen Capture #8

```
1  #!/usr/bin/env python3
2
3  iPhone = "x" # make sure you use a lower case x here
4
5  if iPhone == "10" or iPhone.upper() == "X": # use lower case X here
6      print("The iPhone is the latest")
7  else:
8      print("The iPhone is not the latest")
9
```

PROBLEMS    OUTPUT    TERMINAL    DEBUG CONSOLE

```
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$ python3 assignment_03_02.py
The iPhone is the latest
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$
```

## Screen Capture #9

```
1  #!/usr/bin/env python3
2
3  sport = "hockey"
4  city = "Anaheim"
5  team = ""
6
7  if sport == "baseball":
8      if city.lower() == "anaheim":
9          team = "Angels"
10         if city.lower() == "los angeles":
11             team = "Dodgers"
12     elif sport == "hockey":
13         if city.lower() == "anaheim":
14             team = "Ducks"
15         if city.lower() == "los angeles":
16             team = "Kings"
17
18     print("The " + sport + " team in " + city + " is the " + team)
19
```

PROBLEMS    OUTPUT    TERMINAL    DEBUG CONSOLE

```
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$ python3 assignment_03_03.py
The hockey team in Anaheim is the Ducks
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$
```



## Screen Capture #10

```
1  #!/usr/bin/env python3
2
3  choice = "y"
4  while choice.lower() == "y":
5      print("Hello!")
6      choice = input("Say Hello again? (y/n): ")
7
8  print("Good bye!")
9
```

PROBLEMS    OUTPUT    TERMINAL    DEBUG CONSOLE

```
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$ python3 assignment_03_04.py
Hello!
Say Hello again? (y/n): y
Hello!
Say Hello again? (y/n): y
Hello!
Say Hello again? (y/n): n
Good bye!
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$
```

## Screen Capture #11

```
1  #!/usr/bin/env python3
2
3  counter = 0
4  print("while Loop is < 5")
5  while counter < 5:
6      print(counter, end=" ")
7      counter += 1
8  print("\nThe loop has ended")
9
```

PROBLEMS    OUTPUT    TERMINAL    DEBUG CONSOLE

```
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$ python3 assignment_03_05.py
while Loop is < 5
0 1 2 3 4
The loop has ended
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$
```

### Screen Capture #12

```
1  #! /usr/bin/env python3
2
3  print("for Loop in range 5")
4  for i in range(5):
5      print(i, end=" ")
6  print("\nThe loop has ended")
7
```

PROBLEMS   OUTPUT   TERMINAL   DEBUG CONSOLE

zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3\$ python3 assignment\_03\_05.py  
for Loop in range 5  
0 1 2 3 4  
The loop has ended  
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3\$

### Screen Capture #13

```
1  #! /usr/bin/env python3
2
3  print("for Loop in range 5 to 10")
4  for i in range(5, 10):
5      print(i, end=" ")
6  print("\nThe loop has ended")
7
```

PROBLEMS   OUTPUT   TERMINAL   DEBUG CONSOLE

zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3\$ python3 assignment\_03\_05.py  
for Loop in range 5 to 10  
5 6 7 8 9  
The loop has ended  
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3\$



#### Screen Capture #14

```
1  #!/usr/bin/env python3
2
3  print("for Loop in range 0 to 10, skip 2")
4  for i in range(0, 10, 2):
5      print(i, end=" ")
6  print("\nThe loop has ended")
7
```

PROBLEMS   OUTPUT   TERMINAL   DEBUG CONSOLE

```
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$ python3 assignment_03_05.py
for Loop in range 0 to 10, skip 2
0 2 4 6 8
The loop has ended
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$
```

#### Screen Capture #15

```
1  #!/usr/bin/env python3
2
3  print("Enter 'exit' when you're done.\n")
4  while True:
5      data = input("Enter an integer to sqaure: ")
6      if data == "exit":
7          break
8      i = int(data)
9      print(i, "squared is", i * i, "\n")
10 print("The program has ended")
11
```

PROBLEMS   OUTPUT   TERMINAL   DEBUG CONSOLE

```
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$ python3 assignment_03_06.py
Enter 'exit' when you're done.

Enter an integer to sqaure: 5
5 squared is 25

Enter an integer to sqaure: 2
2 squared is 4

Enter an integer to sqaure: exit
The program has ended
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$
```

## Screen Capture #16

```
1  #!/usr/bin/env python3
2
3  more = "y"
4  while more.lower() == "y":
5      miles_driven = float(input("Enter miles driven:\t\t"))
6      gallons_used = float(input("Enter gallons of gas used:\t"))
7
8      # validate input
9      if miles_driven <= 0 or gallons_used <= 0:
10         print("Both entries must be greater than zero. Try again.\n ")
11         continue # send flow back to the top
12
13         mpg = round(miles_driven / gallons_used, 2)
14         print("Miles Per Gallon:", mpg, "\n")
15
16         more = input("Continue? (y/n): ")
17         print()
18
19     print("The program has ended")
20
```

PROBLEMS    OUTPUT    TERMINAL    DEBUG CONSOLE

```
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$ python3 assignment_03_07.py
Enter miles driven:      0
Enter gallons of gas used: 75
Both entries must be greater than zero. Try again.

Enter miles driven:      75
Enter gallons of gas used: 3
Miles Per Gallon: 25.0

Continue? (y/n): n

The program has ended
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$
```

### Screen Capture #17

```
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$ python3 future_value.py
Welcome to the Future Value Calculator

Enter monthly investment:      500
Enter yearly interest rate:    10
Enter number of years:        15
Future value:                  208962.13

Continue? (y/n): y

Enter monthly investment:      100
Enter yearly interest rate:    12
Enter number of years:        10
Future value:                  23233.91

Continue? (y/n): n

The program has ended
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$
```

### Screen Capture #18 (EC)

```
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$ python3 tip_calculator.py
Tip Calculator

Cost of meal:    52.31

15%
Tip amount:      7.85
Total amount:    60.16

20%
Tip amount:      10.46
Total amount:    62.77

25%
Tip amount:      13.08
Total amount:    65.39

zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$
```

### Screen Capture #19 (EC)

```
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$ python3 change_calculator.py
Change Calculator

Enter number of cents (0-99): 99

Quarters:      3
Dimes:         2
Nickels:       0
Pennies:       4

Continue? (y/n): y

Enter number of cents (0-99): 55

Quarters:      2
Dimes:         0
Nickels:       1
Pennies:       0

Continue? (y/n): n

Bye!
zmeyer@syn0095:~/Documents/projects/CIMP8A/Week 3$
```