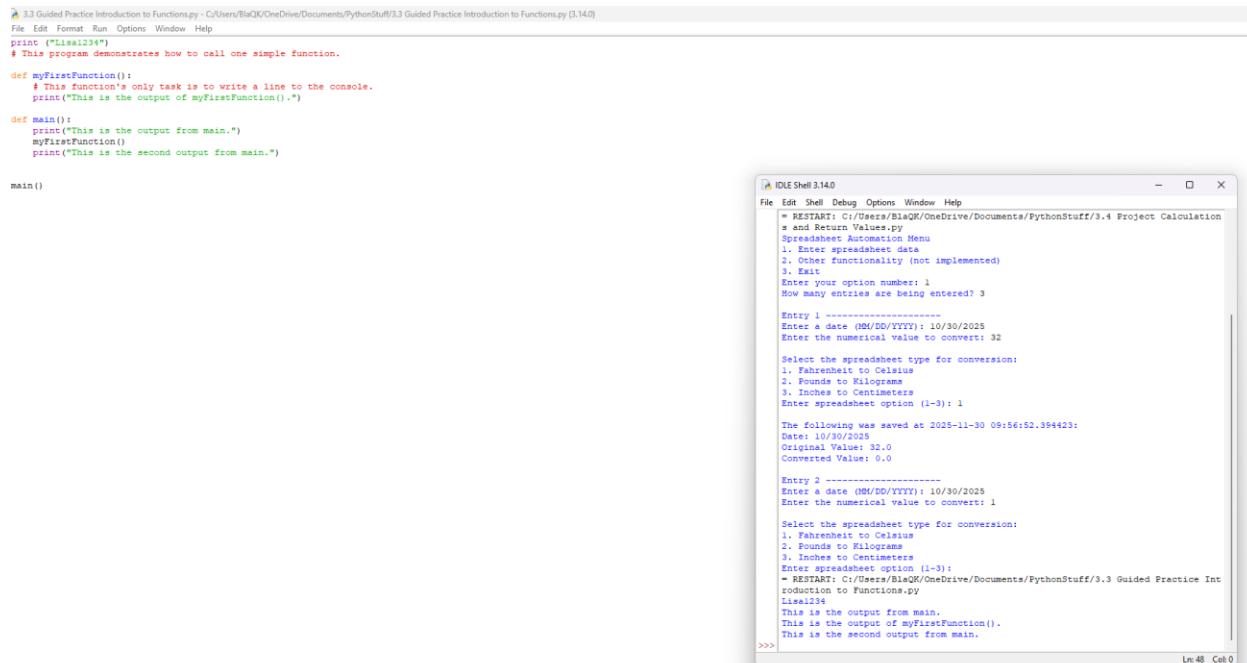


## Gerald Blackwell

### 3.3 Guided Practice Introduction to Functions

1.



The image shows a Windows desktop environment. In the top-left corner, there is a code editor window titled "3.3 Guided Practice Introduction to Functions.py". The code inside is:

```
File Edit Format Run Options Window Help
print("Lisal1234")
# This program demonstrates how to call one simple function.

def myFirstFunction():
    # This function's only task is to write a line to the console.
    print("This is the output of myFirstFunction().")

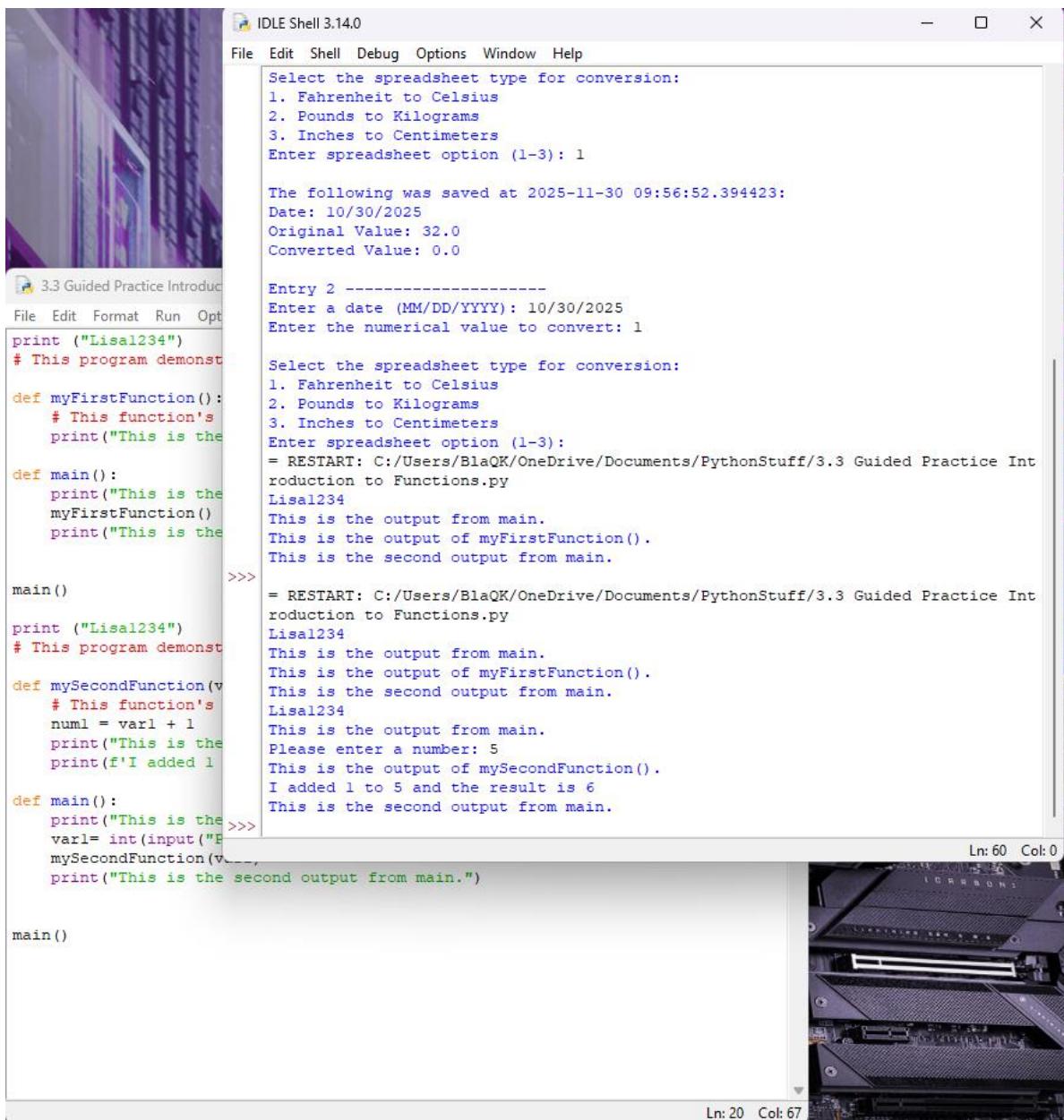
def main():
    print("This is the output from main.")
    myFirstFunction()
    print("This is the second output from main.")

main()
```

In the bottom-right corner, there is a terminal window titled "IDLE Shell 3.140". The terminal output is:

```
File Edit Shell Debug Options Window Help
File Edit Shell Debug Options Window Help
= RESTART: C:/Users/BlaQK/OneDrive/Documents/PythonStuff/3.3 Project Calculation
s and Returns Value.py
Spreadsheet Automation Menu
1. Enter spreadsheet data
2. Other functionality (not implemented)
3. Exit
Enter your option number: 1
How many entries are being entered? 3
Entry 1 -----
Enter a date (MM/DD/YYYY): 10/30/2025
Enter the numerical value to convert: 32
Select the spreadsheet type for conversion:
1. Fahrenheit to Celsius
2. Pounds to Kilograms
3. Inches to Centimeters
Enter spreadsheet option (1-3): 1
The following was saved at 2025-11-30 09:56:52.394423:
Date: 10/30/2025
Original Value: 32.0
Converted Value: 0.0
Entry 2 -----
Enter a date (MM/DD/YYYY): 10/30/2025
Enter the numerical value to convert: 1
Select the spreadsheet type for conversion:
1. Fahrenheit to Celsius
2. Pounds to Kilograms
3. Inches to Centimeters
Enter spreadsheet option (1-3): 1
The following was saved at 2025-11-30 09:56:52.394423:
Date: 10/30/2025
Original Value: 1.0
Converted Value: 0.0
>>>
```

2.



IDLE Shell 3.14.0

```
File Edit Shell Debug Options Window Help
Select the spreadsheet type for conversion:
1. Fahrenheit to Celsius
2. Pounds to Kilograms
3. Inches to Centimeters
Enter spreadsheet option (1-3): 1

The following was saved at 2025-11-30 09:56:52.394423:
Date: 10/30/2025
Original Value: 32.0
Converted Value: 0.0

Entry 2 -----
Enter a date (MM/DD/YYYY): 10/30/2025
Enter the numerical value to convert: 1

Select the spreadsheet type for conversion:
1. Fahrenheit to Celsius
2. Pounds to Kilograms
3. Inches to Centimeters
Enter spreadsheet option (1-3):
= RESTART: C:/Users/BlaQK/OneDrive/Documents/PythonStuff/3.3 Guided Practice Introduction to Functions.py
Lisal234
This is the output from main.
This is the output of myFirstFunction().
This is the second output from main.

>>>
= RESTART: C:/Users/BlaQK/OneDrive/Documents/PythonStuff/3.3 Guided Practice Introduction to Functions.py
Lisal234
This is the output from main.
This is the output of myFirstFunction().
This is the second output from main.
Lisal234
This is the output from main.
Please enter a number: 5
This is the output of mySecondFunction().
I added 1 to 5 and the result is 6
This is the second output from main.

>>>
print("This is the second output from main.")

Ln: 60 Col: 0
```

3.

```

myThirdFunction0.py - C:/Users/BlaQK/OneDrive/Documents/PythonStuff/myThirdFunction0...
File Edit Format Run Options Window Help
print("Gerbla7878")
# This program demonstrates how to pass a parameter to a function and return a value

def myThirdFunction(var1):
    # This function's task is to add 1 to the value passed to it, and to return
    num1 = var1 + 1
    return num1

def main():
    print("This is the output from main.")
    var1 = int(input("Please enter a number: "))
    newNum = myThirdFunction(var1)
    print(f"This is the second output from main showing that {var1} plus 1 is {newNum}")

main()

```

IDLE Shell 3.14.0

```

File Edit Shell Debug Options Window Help
Converted Value: 0.0
Entry 2 -----
Enter a date (MM/DD/YYYY): 10/30/2025
Enter the numerical value to convert: 1

Select the spreadsheet type for conversion:
1. Fahrenheit to Celsius
2. Pounds to Kilograms
3. Inches to Centimeters
Enter spreadsheet option (1-3):
= RESTART: C:/Users/BlaQK/OneDrive/Documents/PythonStuff/3.3 Guided Practice Introduction to Functions.py
Lisal234
This is the output from main.
This is the output of myFirstFunction().
This is the second output from main.

>>>
= RESTART: C:/Users/BlaQK/OneDrive/Documents/PythonStuff/3.3 Guided Practice Introduction to Functions.py
Lisal234
This is the output from main.
This is the output of myFirstFunction().
This is the second output from main.
Lisal234
This is the output from main.
Please enter a number: 5
This is the output of mySecondFunction().
I added 1 to 5 and the result is 6
This is the second output from main.

>>>
== RESTART: C:/Users/BlaQK/OneDrive/Documents/PythonStuff/myThirdFunction().py =
Gerbla7878
== RESTART: C:/Users/BlaQK/OneDrive/Documents/PythonStuff/myThirdFunction().py =
Gerbla7878
This is the output from main.
Please enter a number: 5
This is the second output from main showing that 5 plus 1 is 6.

>>>

```

1. If the `int` function is not used, the value entered by the user will be stored as a string rather than a number. This means Python will treat the input as text
2. Yes. Any function can be written to accept a parameter and return a value.
3. Advantage of using a function like `myThirdFunction()` is that it makes your program easier to reuse and maintain.

#### 4.

```

introductionToFunctions4.py - C:/Users/BlaQK/OneDrive/Documents/PythonStuff/introductionToFunctions4...
File Edit Format Run Options Window Help
print("Gerbla7878")
# This program demonstrates calling three functions and using parameters and return values

def myFirstFunction():
    print("This is the output from myFirstFunction.")

def mySecondFunction():
    print("This is the output from mySecondFunction.")

def myThirdFunction(var1):
    # Adds 1 to the value passed to it
    num1 = var1 + 1
    return num1

def main():
    print("This is the output from main.")

    # Ask for user input as an integer
    var1 = int(input("Please enter a number: "))

    # Call the first two functions
    myFirstFunction()
    mySecondFunction()

    # Call the third function and capture the returned value
    newNum = myThirdFunction(var1)

    print(f"This is the second output from main showing that {var1} plus 1 is {newNum}")

# Call main to start program
main()

```

IDLE Shell 3.14.0

```

File Edit Shell Debug Options Window Help
3. Inches to Centimeters
Enter spreadsheet option (1-3):
= RESTART: C:/Users/BlaQK/OneDrive/Documents/PythonStuff/3.3 Guided Practice Introduction to Functions.py
Lisal234
This is the output from main.
This is the output of myFirstFunction().
This is the second output from main.

>>>
= RESTART: C:/Users/BlaQK/OneDrive/Documents/PythonStuff/3.3 Guided Practice Introduction to Functions.py
Lisal234
This is the output from main.
This is the output of myFirstFunction().
This is the second output from main.
Lisal234
This is the output from main.
Please enter a number: 5
This is the output of mySecondFunction().
I added 1 to 5 and the result is 6
This is the second output from main.

>>>
== RESTART: C:/Users/BlaQK/OneDrive/Documents/PythonStuff/myThirdFunction().py =
Gerbla7878
== RESTART: C:/Users/BlaQK/OneDrive/Documents/PythonStuff/myThirdFunction().py =
Gerbla7878
This is the output from main.
Please enter a number: 5
This is the second output from main showing that 5 plus 1 is 6.

>>>
= RESTART: C:/Users/BlaQK/OneDrive/Documents/PythonStuff/introductionToFunctions4.py
Gerbla7878
This is the output from main.
Please enter a number: 5
This is the output from myFirstFunction().
This is the output from mySecondFunction().
This is the second output from main showing that 5 plus 1 is 6.

>>>

```