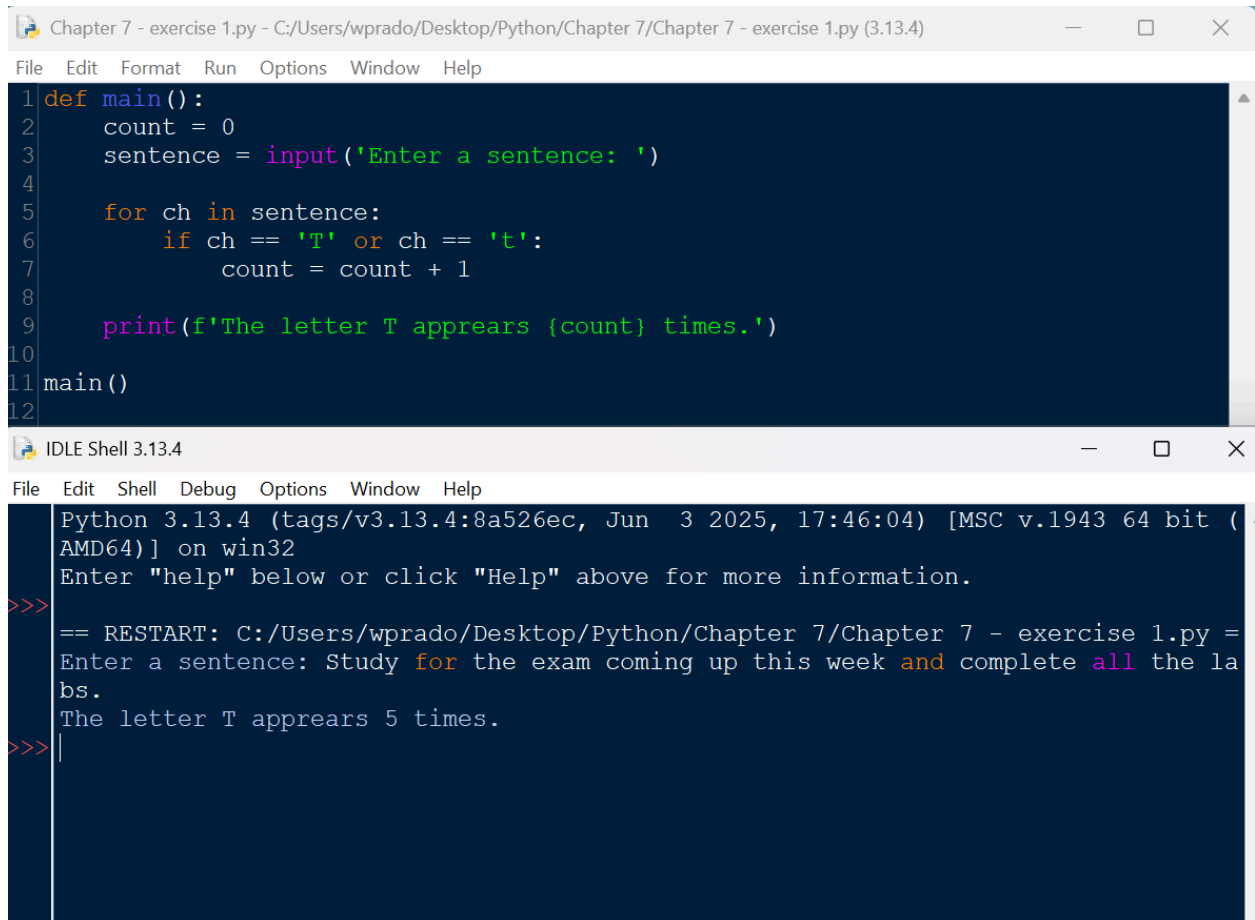


# Chapter 7 - Exercises

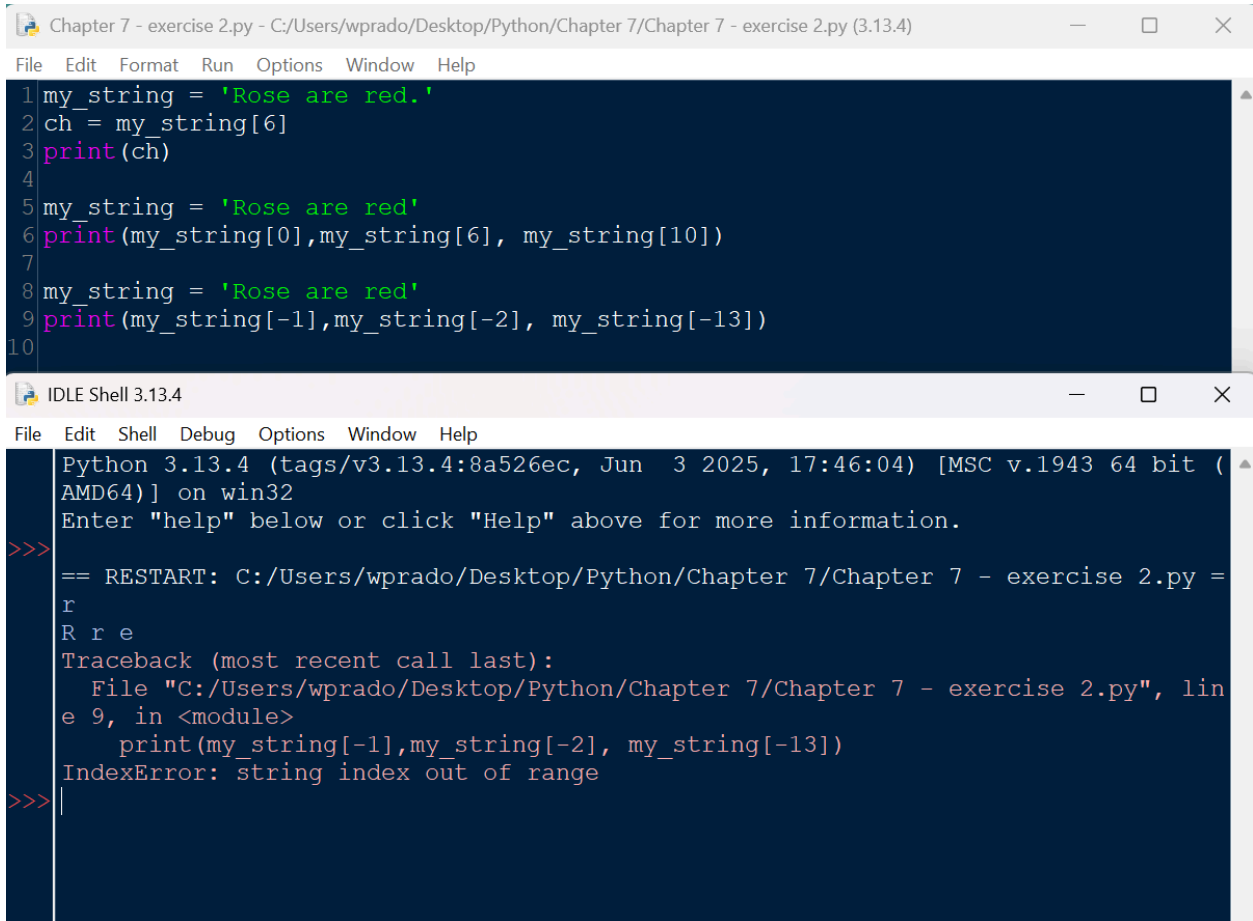


The image shows two windows from the Python IDLE 3.13.4 environment. The top window is the editor for 'Chapter 7 - exercise 1.py', showing a Python script that counts the occurrences of the letter 'T' (case-insensitive) in a user-provided sentence. The script uses a loop and an if-statement to iterate through each character and increment a counter. The bottom window is the 'IDLE Shell 3.13.4', which displays the execution output. It shows the program starting, prompting the user to enter a sentence, and then displaying the result: 'The letter T apprears 5 times.' (Note the typo 'apprears' in the output).

```
Chapter 7 - exercise 1.py - C:/Users/wprado/Desktop/Python/Chapter 7/Chapter 7 - exercise 1.py (3.13.4)
File Edit Format Run Options Window Help
1 def main():
2     count = 0
3     sentence = input('Enter a sentence: ')
4
5     for ch in sentence:
6         if ch == 'T' or ch == 't':
7             count = count + 1
8
9     print(f'The letter T apprears {count} times.')
10
11 main()
12

IDLE Shell 3.13.4
File Edit Shell Debug Options Window Help
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 7/Chapter 7 - exercise 1.py =
Enter a sentence: Study for the exam coming up this week and complete all the labs.
The letter T apprears 5 times.
>>> |
```

# Chapter 7 - Exercises



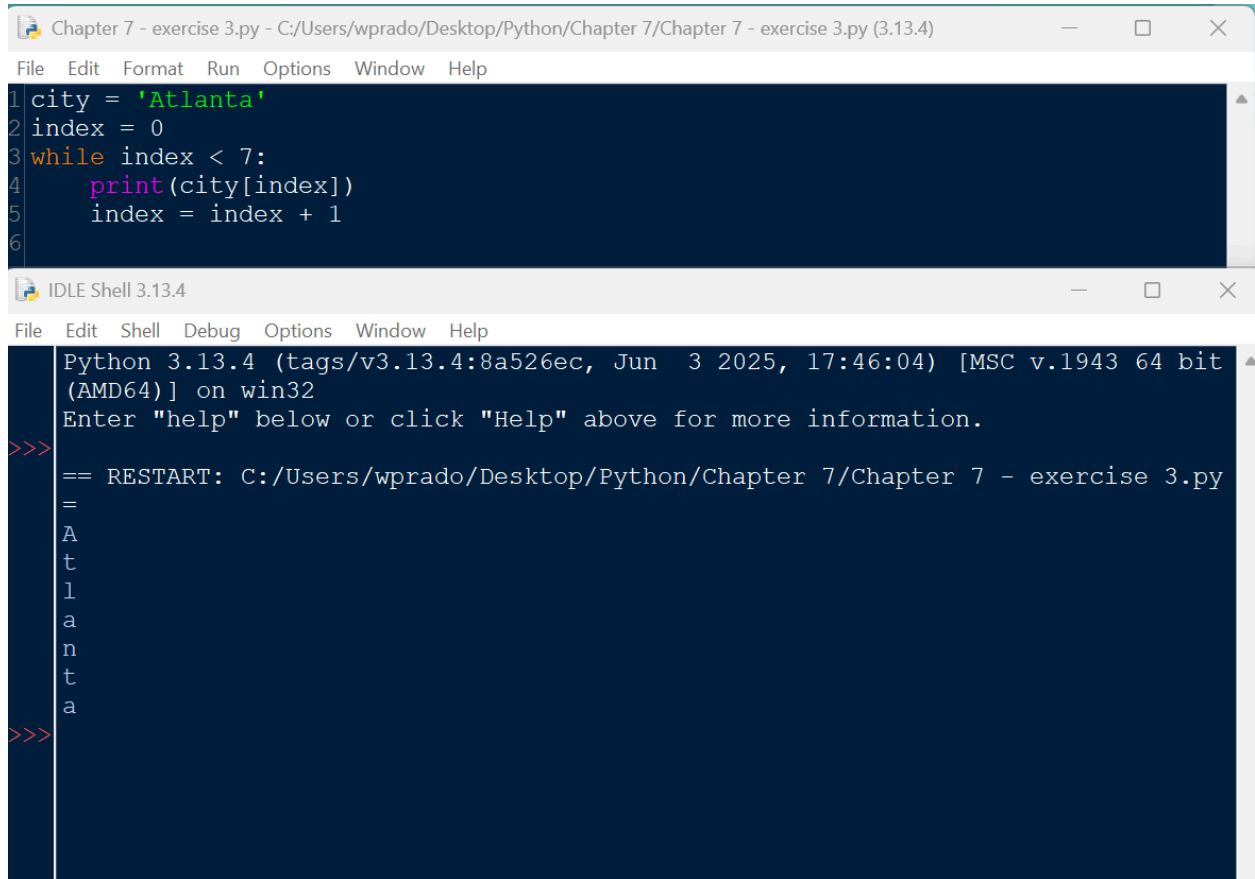
The image shows a screenshot of a Python IDLE environment. The top window is titled "Chapter 7 - exercise 2.py - C:/Users/wprado/Desktop/Python/Chapter 7/Chapter 7 - exercise 2.py (3.13.4)". It contains the following Python code:

```
1 my_string = 'Rose are red.'
2 ch = my_string[6]
3 print(ch)
4
5 my_string = 'Rose are red'
6 print(my_string[0],my_string[6], my_string[10])
7
8 my_string = 'Rose are red'
9 print(my_string[-1],my_string[-2], my_string[-13])
10
```

The bottom window is titled "IDLE Shell 3.13.4". It shows the output of the script execution, which includes a restart message and a traceback indicating an `IndexError: string index out of range` at line 9, column 13.

```
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 7/Chapter 7 - exercise 2.py =
r
R r e
Traceback (most recent call last):
  File "C:/Users/wprado/Desktop/Python/Chapter 7/Chapter 7 - exercise 2.py", line 9, in <module>
    print(my_string[-1],my_string[-2], my_string[-13])
IndexError: string index out of range
>>>
```

# Chapter 7 - Exercises



The image shows a screenshot of a Python IDLE environment. The top window, titled "Chapter 7 - exercise 3.py", contains the following Python code:

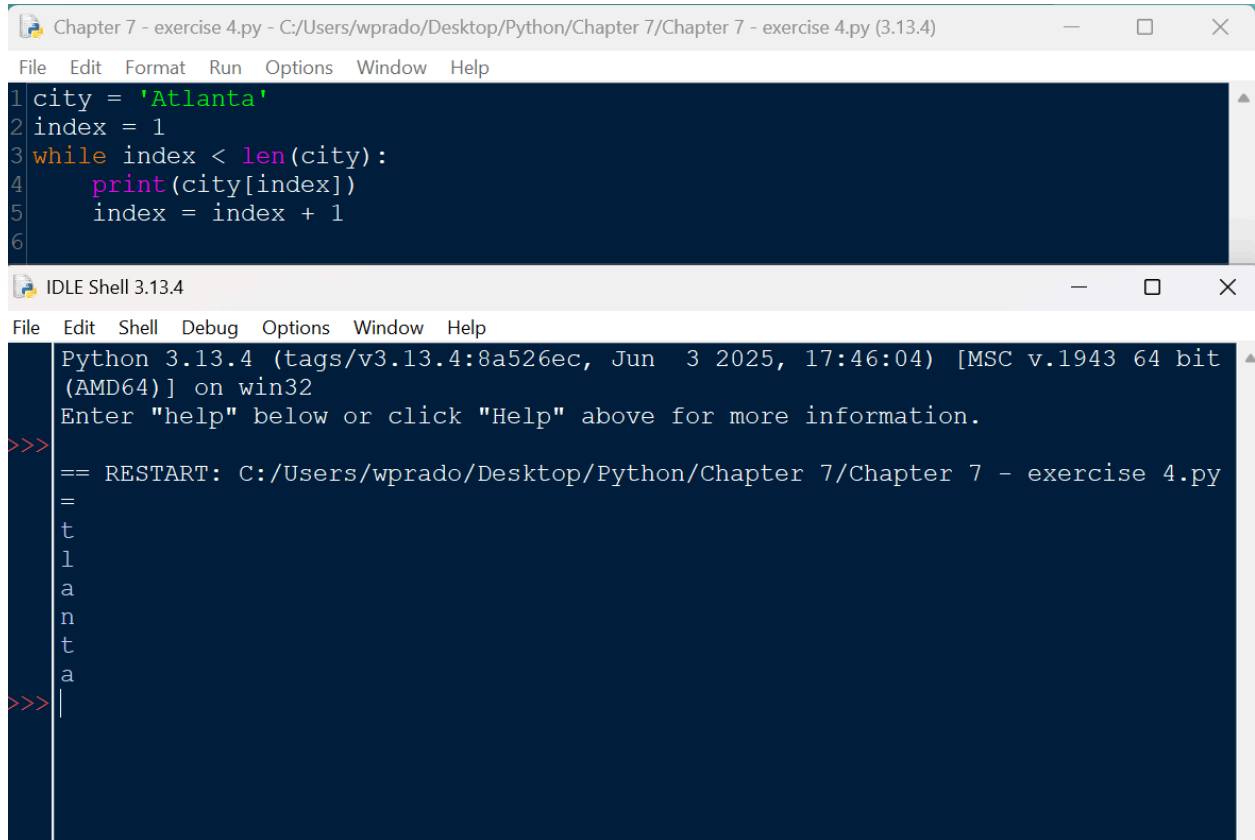
```
1 city = 'Atlanta'
2 index = 0
3 while index < 7:
4     print(city[index])
5     index = index + 1
6
```

The bottom window, titled "IDLE Shell 3.13.4", shows the output of the script. It displays the Python version and architecture, followed by the execution of the script which prints the characters of the word "Atlanta" on separate lines.

```
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 7/Chapter 7 - exercise 3.py
=
A
t
l
a
n
t
a
>>>
```

# Chapter 7 - Exercises

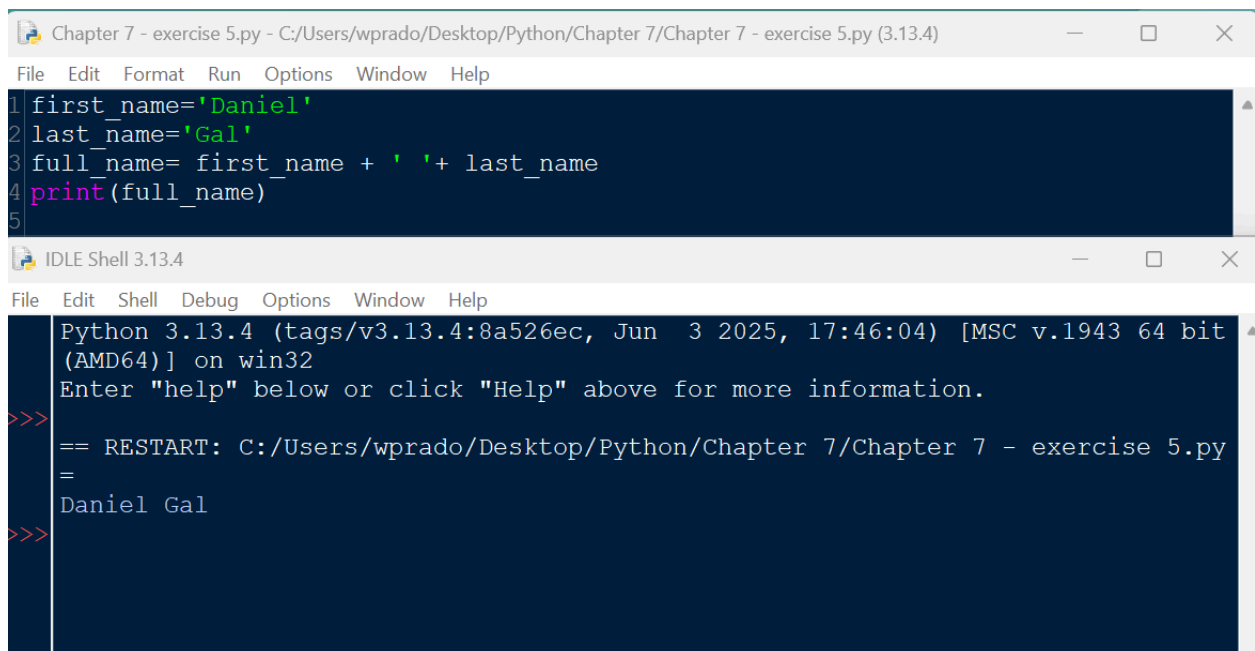


The screenshot shows an IDE window titled "Chapter 7 - exercise 4.py - C:/Users/wprado/Desktop/Python/Chapter 7/Chapter 7 - exercise 4.py (3.13.4)". The menu bar includes File, Edit, Format, Run, Options, Window, and Help. The code editor contains the following Python code:

```
1 city = 'Atlanta'
2 index = 1
3 while index < len(city):
4     print(city[index])
5     index = index + 1
6
```

Below the code editor is the IDLE Shell 3.13.4 window. Its menu bar includes File, Edit, Shell, Debug, Options, Window, and Help. The shell displays the following output:

```
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 7/Chapter 7 - exercise 4.py
=
t
l
a
n
t
a
>>>|
```



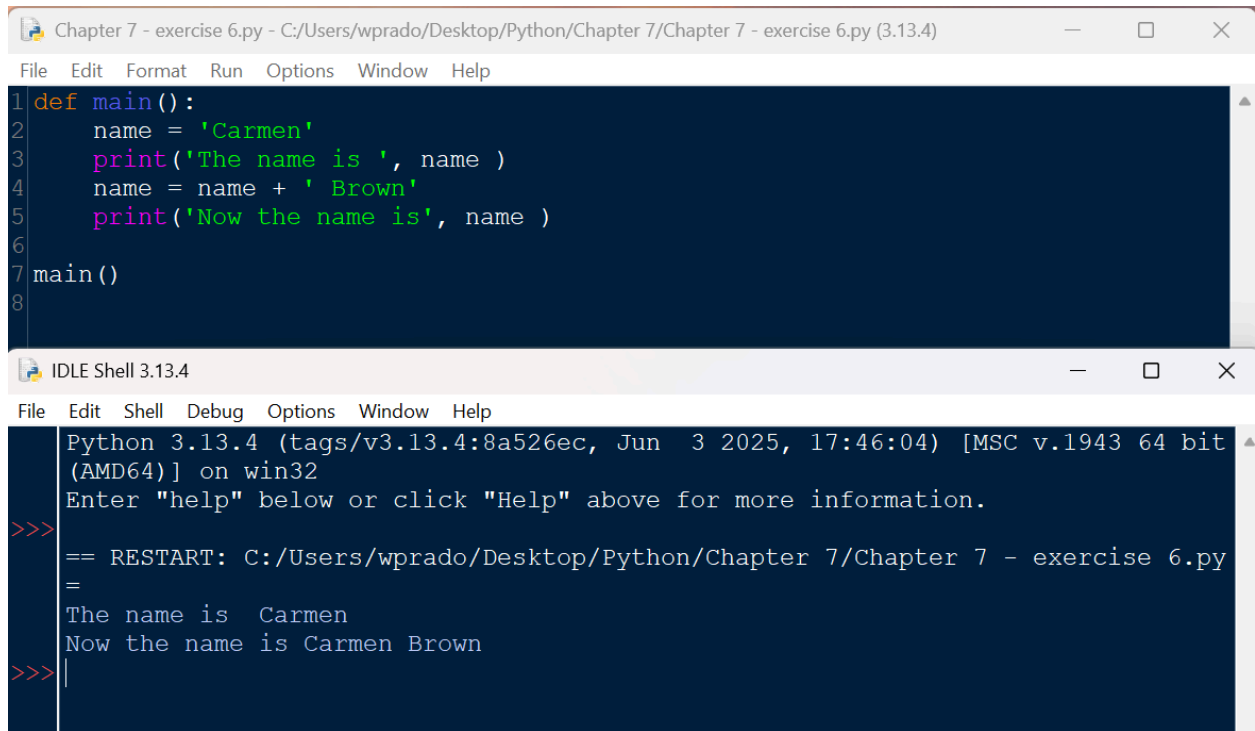
The screenshot shows an IDE window titled "Chapter 7 - exercise 5.py - C:/Users/wprado/Desktop/Python/Chapter 7/Chapter 7 - exercise 5.py (3.13.4)". The menu bar includes File, Edit, Format, Run, Options, Window, and Help. The code editor contains the following Python code:

```
1 first_name='Daniel'
2 last_name='Gal'
3 full_name= first_name + ' ' + last_name
4 print(full_name)
5
```

Below the code editor is the IDLE Shell 3.13.4 window. Its menu bar includes File, Edit, Shell, Debug, Options, Window, and Help. The shell displays the following output:

```
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 7/Chapter 7 - exercise 5.py
=
Daniel Gal
>>>
```

# Chapter 7 - Exercises



The image shows a screenshot of a Python IDE window titled "Chapter 7 - exercise 6.py - C:/Users/wprado/Desktop/Python/Chapter 7/Chapter 7 - exercise 6.py (3.13.4)". The window has a menu bar with "File", "Edit", "Format", "Run", "Options", "Window", and "Help". The main editor area contains the following Python code:

```
1 def main():
2     name = 'Carmen'
3     print('The name is ', name)
4     name = name + ' Brown'
5     print('Now the name is', name)
6
7 main()
8
```

Below the editor is a terminal window titled "IDLE Shell 3.13.4" with a menu bar including "File", "Edit", "Shell", "Debug", "Options", "Window", and "Help". The terminal displays the output of running the script:

```
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 7/Chapter 7 - exercise 6.py
>>> The name is  Carmen
>>> Now the name is Carmen Brown
>>> |
```

# Chapter 7 - Exercises

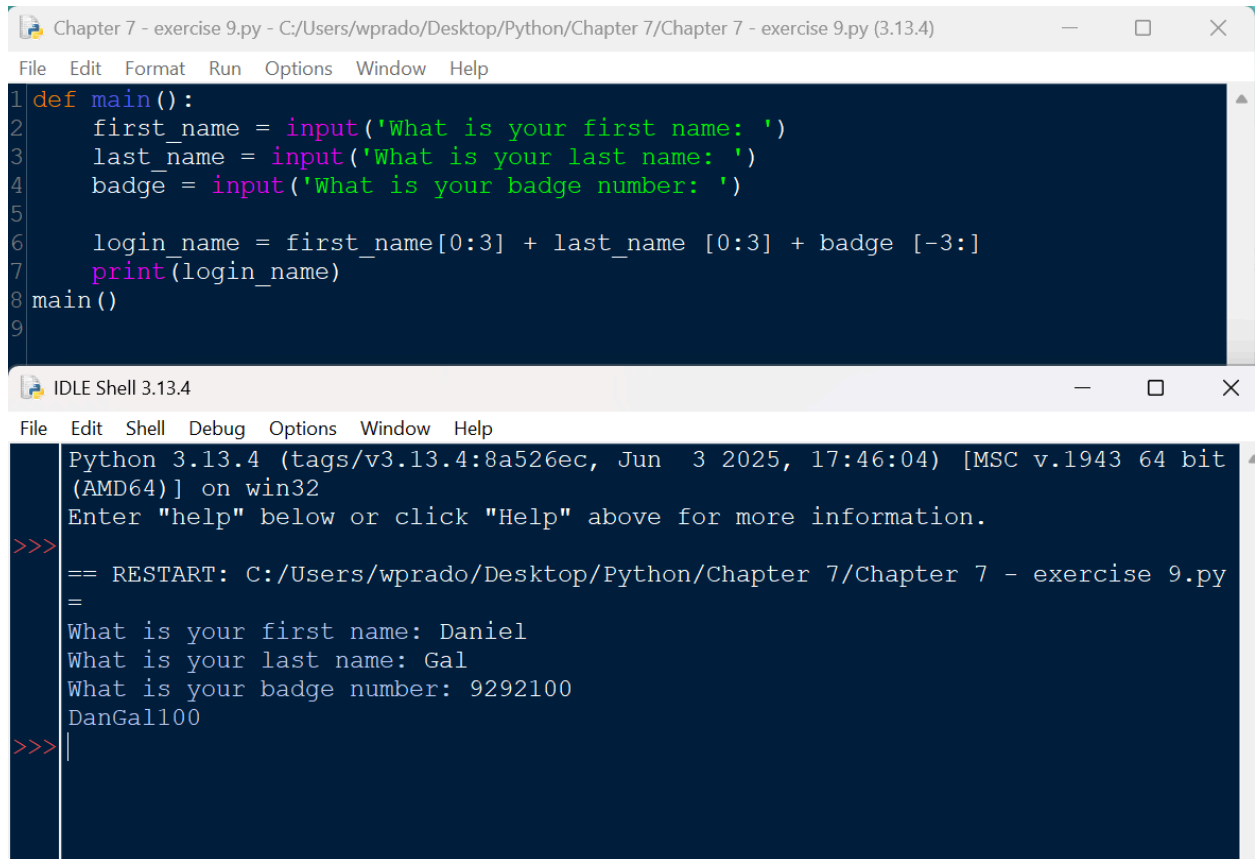
```
Chapter 7 - exercise 7.py - C:/Users/wprado/Desktop/Python/Chapter 7/Chapter 7 - exercise 7.py (3.13.4)
File Edit Format Run Options Window Help
1 full_name = 'Patty Lynn Smith'
2 middle_name = full_name[6:10]
3 print(middle_name)
4
5 print('=====')
6
7 full_name = 'Patty Lynn Smith'
8 middle_name = full_name[0:4]
9 print(middle_name)
10
11 print('=====')
12
13 full_name = 'Patty Lynn Smith'
14 middle_name = full_name[11:15]
15 print(middle_name)
16
```

```
IDLE Shell 3.13.4
File Edit Shell Debug Options Window Help
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 7/Chapter 7 - exercise 7.py =
Lynn
=====
Patt
=====
Smit
>>>
```

```
Chapter 7 - exercise 8.py - C:/Users/wprado/Desktop/Python/Chapter 7/Chapter 7 - exercise 8.py (3.13.4)
File Edit Format Run Options Window Help
1 letters = 'A B C D E F G H I J K L M N O P Q R S T U V W X Y Z '
2 print(letters[0:26:6])
3
```

```
IDLE Shell 3.13.4
File Edit Shell Debug Options Window Help
Python 3.13.4 (tags/v3.13.4:8a526ec, Jun 3 2025, 17:46:04) [MSC v.1943 64 bit (AMD64)] on w
in32
Enter "help" below or click "Help" above for more information.
>>>
== RESTART: C:/Users/wprado/Desktop/Python/Chapter 7/Chapter 7 - exercise 8.py =
ADGJM
>>>
```

# Chapter 7 - Exercises

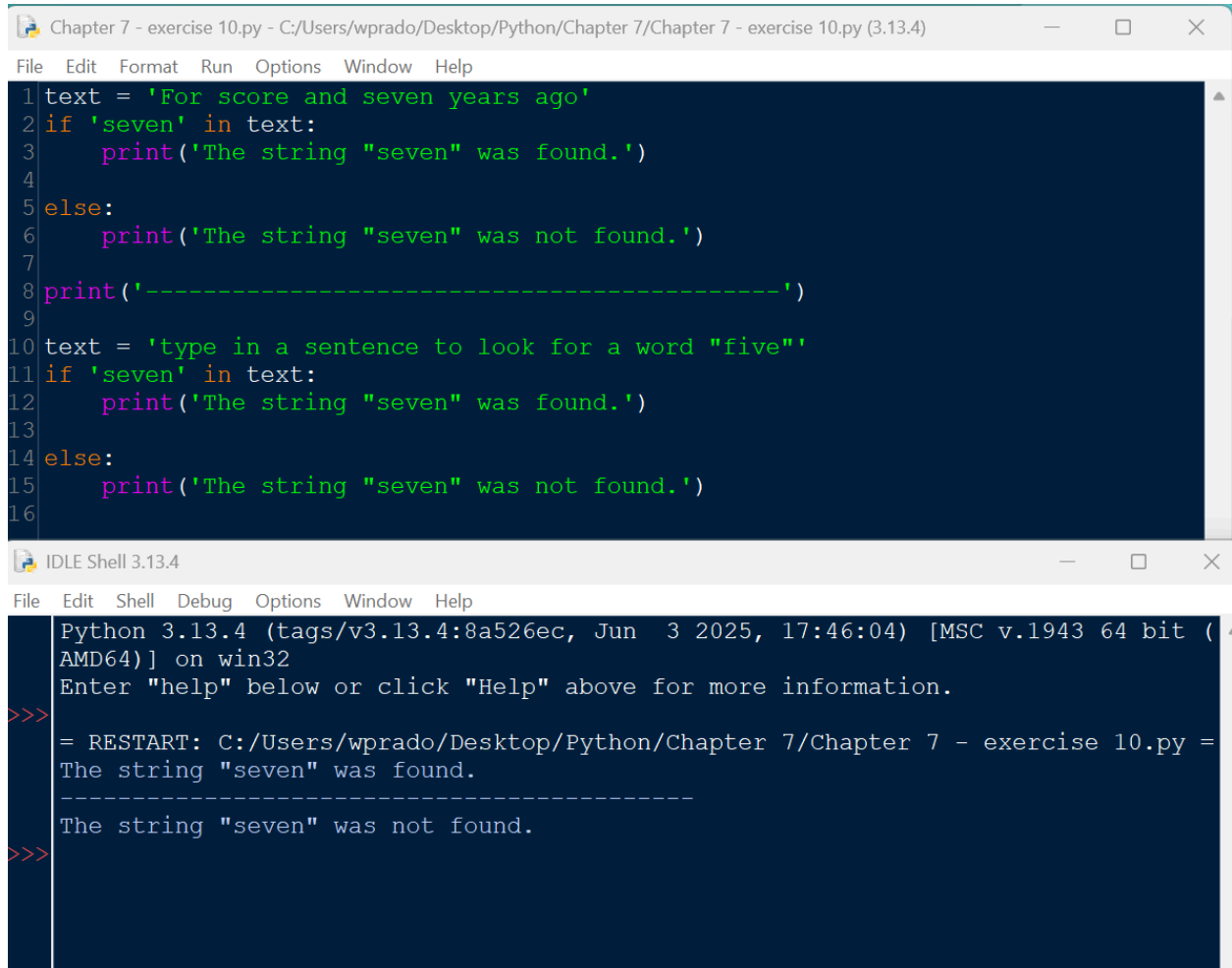


The image shows two windows from the Python IDLE 3.13.4 application. The top window is the editor for 'Chapter 7 - exercise 9.py', showing a Python script. The bottom window is the 'IDLE Shell 3.13.4', showing the execution of the script with user input.

```
Chapter 7 - exercise 9.py - C:/Users/wprado/Desktop/Python/Chapter 7/Chapter 7 - exercise 9.py (3.13.4)
File Edit Format Run Options Window Help
1 def main():
2     first_name = input('What is your first name: ')
3     last_name = input('What is your last name: ')
4     badge = input('What is your badge number: ')
5
6     login_name = first_name[0:3] + last_name [0:3] + badge [-3:]
7     print(login_name)
8 main()
9
```

```
IDLE Shell 3.13.4
File Edit Shell Debug Options Window Help
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 7/Chapter 7 - exercise 9.py
>>> =
>>> What is your first name: Daniel
>>> What is your last name: Gal
>>> What is your badge number: 9292100
>>> DanGal100
>>> |
```

# Chapter 7 - Exercises



The image shows a screenshot of a Python IDE window titled "Chapter 7 - exercise 10.py". The window contains a Python script with two identical code blocks. The first block defines a variable `text` with the value `'For score and seven years ago'` and uses an `if` statement to check if the string `'seven'` is in `text`. If it is, it prints `'The string "seven" was found.'`; otherwise, it prints `'The string "seven" was not found.'`. The second block is identical but uses the string `'type in a sentence to look for a word "five"'`. Below the script, the "IDLE Shell 3.13.4" window shows the execution output. It displays the Python version and architecture, followed by the output of the first code block: `The string "seven" was found.` and a separator line. The second code block's output, `The string "seven" was not found.`, is not yet visible.

```
Chapter 7 - exercise 10.py - C:/Users/wprado/Desktop/Python/Chapter 7/Chapter 7 - exercise 10.py (3.13.4)
File Edit Format Run Options Window Help
1 text = 'For score and seven years ago'
2 if 'seven' in text:
3     print('The string "seven" was found.')
4
5 else:
6     print('The string "seven" was not found.')
7
8 print('-----')
9
10 text = 'type in a sentence to look for a word "five"'
11 if 'seven' in text:
12     print('The string "seven" was found.')
13
14 else:
15     print('The string "seven" was not found.')
16

IDLE Shell 3.13.4
File Edit Shell Debug Options Window Help
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 7/Chapter 7 - exercise 10.py =
The string "seven" was found.
-----
The string "seven" was not found.
>>>
```