

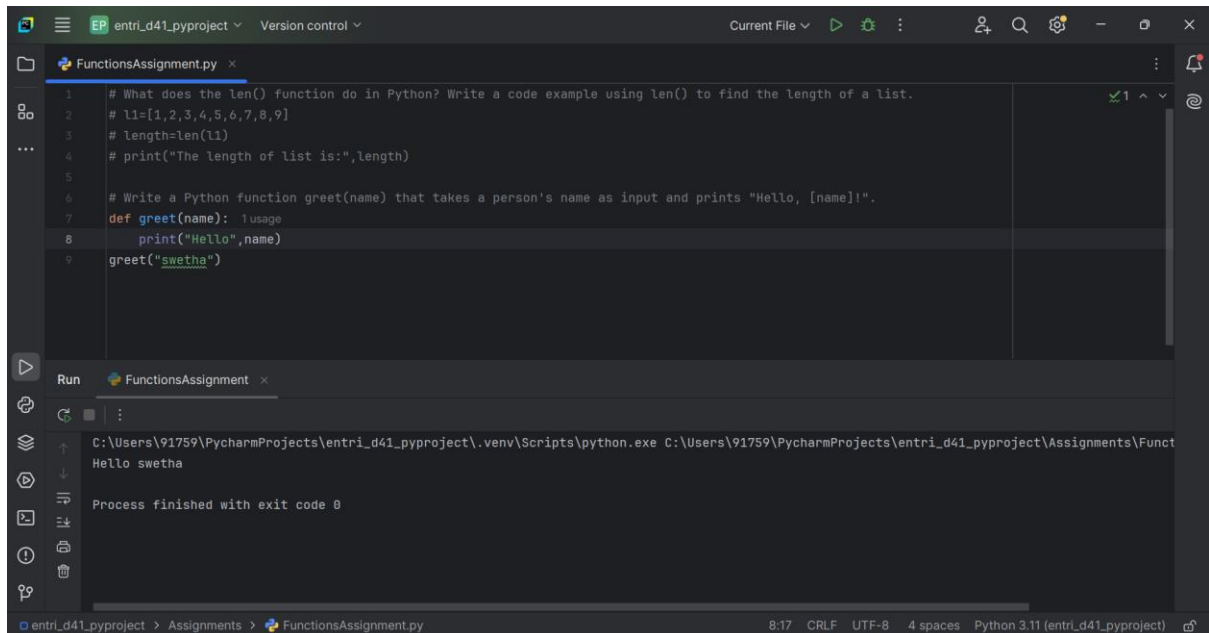
The screenshot shows the PyCharm IDE with a file named `FunctionsAssignment.py`. The code in the editor is as follows:

```
1 # What does the len() function do in Python? Write a code example using len() to find the length of a list.
2 l1=[1,2,3,4,5,6,7,8,9]
3 length=len(l1)
4 print("The length of list is:",length)
```

The Run console shows the output:

```
C:\Users\91759\PycharmProjects\entri_d41_pyproject\.venv\Scripts\python.exe C:\Users\91759\PycharmProjects\entri_d41_pyproject\Assignments\Funct
The length of list is: 9
Process finished with exit code 0
```

The status bar at the bottom indicates the file is at line 4, column 30, with CRLF line endings, UTF-8 encoding, 4 spaces for indentation, and Python 3.11 interpreter.



The screenshot shows the PyCharm IDE with the same file `FunctionsAssignment.py`. The code in the editor is as follows:

```
1 # What does the len() function do in Python? Write a code example using len() to find the length of a list.
2 # l1=[1,2,3,4,5,6,7,8,9]
3 # length=len(l1)
4 # print("The length of list is:",length)
5
6 # Write a Python function greet(name) that takes a person's name as input and prints "Hello, [name]!".
7 def greet(name):
8     print("Hello",name)
9     greet("swetha")
```

The Run console shows the output:

```
C:\Users\91759\PycharmProjects\entri_d41_pyproject\.venv\Scripts\python.exe C:\Users\91759\PycharmProjects\entri_d41_pyproject\Assignments\Funct
Hello swetha
Process finished with exit code 0
```

The status bar at the bottom indicates the file is at line 9, column 10, with CRLF line endings, UTF-8 encoding, 4 spaces for indentation, and Python 3.11 interpreter.

The screenshot shows the PyCharm IDE with a file named `FunctionsAssignment.py` open. The code defines a function `find_maximum` that takes a list of integers and returns the maximum value without using the built-in `max()` function. The function uses a loop to iterate through the list and compare values. The code is as follows:

```
10 # greet("swetha")
11
12 # Write a Python function find_maximum(numbers) that takes a list of integers and returns the maximum value without using the built-in max()
13 # Use a loop to iterate through the list and compare values.
14 numbers=[]
15 def find_maximum(numbers): 1 usage
16     max=numbers[0]
17     for i in numbers:
18         if i>max:
19             max=i
20     print(max)
21 find_maximum([56,90,76,12,100])
```

The Run console shows the output of the function call:

```
Run FunctionsAssignment
C:\Users\91759\PycharmProjects\entri_d41_pyproject\.venv\Scripts\python.exe C:\Users\91759\PycharmProjects\entri_d41_pyproject\Assignments\Funct
100
Process finished with exit code 0
```

The screenshot shows the PyCharm IDE with a file named `FunctionsAssignment.py` open. The code explains the difference between local and global variables in a Python function. It defines a function `fn` that prints the value of a local variable `v` and a global variable `v`. The code is as follows:

```
22 # Explain the difference between local and global variables in a Python function.
23 # Write a program where a global variable and a local variable have the same name and show how Python differentiates between them.
24 """
25 Local Variable: A variable declared inside a function whose scope is limited to the function in which it is defined.
26 It cannot be accessed outside the function
27 Global Variable: A variable declared outside any function which can be accessed and modified throughout the program (including inside
28 functions) unless shadowed by a local variable of the same name. To modify a global variable inside a function,
29 you need to use the global keyword.
30 """
31 v=10
32 def fn(): 1 usage
33     v=20
34     print("Local variable(v) inside function:",v)
35     print("Global variable(v) outside function:",v)
36 fn()
```

The Run console shows the output of the function call:

```
Run FunctionsAssignment
C:\Users\91759\PycharmProjects\entri_d41_pyproject\.venv\Scripts\python.exe C:\Users\91759\PycharmProjects\entri_d41_pyproject\Assignments\Funct
Global variable(v) outside function: 10
Local variable(v) inside function: 20
Process finished with exit code 0
```

