

Class task

20210804 - Class task.py

Lesson_11 - Practice

Lesson_11 - Practice.py

Class task.py

20210804 C:\Users\diegoortizmatajira\Documents\Personal\python-learning\clas

venv library root

Class task.py

credentials.txt

Lesson_11 - Practice.py

Lesson_11 - Practice.txt

output.csv

External Libraries

Scratches and Consoles

21

Create a csv

20

Write, Read and append data to a file.

19

Employee

18

Employee_FName Employee_LName EmployeeID Employee_Salary

17

1.

16

2.

15

3.

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5.

12

11

def task_create_csv(file_name):

10

print("===== \nTask 1: Write a csv file\n===== ")

9

with open(file_name, "w", encoding="utf-8") as output_file:

8

output_file.write(f'Employee_FName,Employee_LName,EmployeeID,Employee_Salary\n')

7

for i in range(6):

6

first_name = f'First{i}'

5

last_name = f'First{i}'

4

id = f'2021{i}'

3

salary = 5000 * i

2

output_file.write(f'{first_name},{last_name},{id},{salary}\n')

1

print(f'Added line {i + 1}')

22

output_file.close()

1

2

3

def task_read_csv(file_name):

4

print("===== \nTask 2: Read a csv file\n===== ")

5

with open(file_name, "r", encoding="utf-8") as input_file:

6

content = input_file.readlines()

7

count = 0

8

for line in content:

9

count += 1

10

print(f'Line {count}: {line.split(",")}')

11

12

13

def task_append_to_csv(file_name):

14

print("===== \nTask 3: Append data to a csv file\n===== ")

15

with open(file_name, "a", encoding="utf-8") as output_file:

16

for i in range(6, 11):

17

first_name = f'First{i}'

18

last_name = f'First{i}'

19

id = f'2021{i}'

20

salary = 5000 * i

task_create_csv() > with open(file_name, "w", encod...

Run: Lesson_11 - Practice

Externally added files can be added to Git // View Files // Always Add // Don't Ask Again (17 minutes ago)

Externally added files can be added to Git

View Files

Always Add

Don't Ask Again

Git

Run

TODO

Problems

Terminal

Python Packages

Python Console

Event Log

22:27 CRLF UTF-8 4 spaces Python 3.9 (20210804) main

Class task - Execution

PC

File

Edit

View

Navigate

Code

Refactor

Run

Tools

Git

Window

Help

20210804 - Class task.py

Class task

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Git

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Project

Run: Class task

Lesson_11 - Practice.py

Class task.py

Project

Commit

Pull Requests

Structure

Favorites

Task 1: Write a csv file

Added line 1

Added line 2

Added line 3

Added line 4

Added line 5

Added line 6

Task 2: Read a csv file

Line 1: ['Employee_FName', 'Employee_LName', 'EmployeeID', 'Employee_Salary\n']

Line 2: ['First0', 'First0', '20210', '0\n']

Line 3: ['First1', 'First1', '20211', '5000\n']

Line 4: ['First2', 'First2', '20212', '10000\n']

Line 5: ['First3', 'First3', '20213', '15000\n']

Line 6: ['First4', 'First4', '20214', '20000\n']

Line 7: ['First5', 'First5', '20215', '25000\n']

Task 3: Append data to a csv file

Added line 7

Added line 8

Added line 9

Added line 10

Added line 11

Task 2: Read a csv file

Line 1: ['Employee_FName', 'Employee_LName', 'EmployeeID', 'Employee_Salary\n']

Line 2: ['First0', 'First0', '20210', '0\n']

Line 3: ['First1', 'First1', '20211', '5000\n']

Line 4: ['First2', 'First2', '20212', '10000\n']

Line 5: ['First3', 'First3', '20213', '15000\n']

Line 6: ['First4', 'First4', '20214', '20000\n']

Line 7: ['First5', 'First5', '20215', '25000\n']

Line 8: ['First6', 'First6', '20216', '30000\n']

Line 9: ['First7', 'First7', '20217', '35000\n']

Line 10: ['First8', 'First8', '20218', '40000\n']

Line 11: ['First9', 'First9', '20219', '45000\n']

Line 12: ['First10', 'First10', '202110', '50000\n']

Process finished with exit code 0

Externally added files can be added to Git

View Files

Always Add

Don't Ask Again

Git

Run

TODO

Problems

Terminal

Python Packages

Python Console

Event Log

VIM - INSERT25:29CRLFUTF-84 spacesPython 3.9 (20210804)main

Practice

20210804 - Lesson_11 - Practice.py

Class task

Run

Debug

Stop

Restart

Step In

Step Out

Step Over

Step Return

Git

Lesson_11 - Practice.py

Project

20210804 C:\Users\diegoortizmatajira\Documents\Personal\python-learning\clas

venv library root

Class task.py

credentials.txt

Lesson_11 - Practice.py

Lesson_11 - Practice.txt

output.csv

External Libraries

Scratches and Consoles

Database

ScView

```
14 def task_01():
13     print("=====Task 1\n=====")
12     print('* * * * *\nReading all at once\n* * * * *')
11     with open('Lesson_11 - Practice.txt', "r", encoding="utf-8") as input_file:
10         content = input_file.readlines()
9         count = 0
8         for line in content:
7             count += 1
6             print(f'Line {count}: {line}')
5         input_file.close()
4
3     print('* * * * *\nReading by looping\n* * * * *')
2     with open('Lesson_11 - Practice.txt', "r", encoding="utf-8") as input_file:
1         line = input_file.readline()
15         count = 0
1         while line:
2             count += 1
3             print(f'Line {count}: {line}')
4             line = input_file.readline()
5             input_file.close()
6
7     print('* * * * *\nReading once, print later\n* * * * *')
8     lines = []
9     with open('Lesson_11 - Practice.txt', "r", encoding="utf-8") as input_file:
10         line = input_file.readline()
11         while line:
12             lines.append(line)
13             line = input_file.readline()
14         input_file.close()
15         count = 0
16         for line in lines:
17             count += 1
18             print(f'Line {count}: {line}')
19
20
21 def task_02():
22     print("=====Task 2\n=====")
23     with open('Lesson_11 - Practice.txt', "r", encoding="utf-8") as input_file:
24         content = input_file.readlines()
25         count = 0
26         for line in content:
27             count += 1
28             print(f'Line {count}: {line.replace("Python", "Go")}')
29         input_file.close()
30
```

task_01()

> with open('Lesson_11 - Practice...

Git

Run

TODO

Problems

Terminal

Python Packages

Python Console

Event Log

15:17 CRLF UTF-8 4 spaces Python 3.9 (20210804) main

20210804 - Lesson_11 - Practice.py

Lesson_11 - Practice

Lesson_11 - Practice.py

credentials.txt

Project

20210804 C:\Users\diegoortizmatajira\Documents\Personal\python-learning\clas

venv library root

Class task.py

credentials.txt

guest.txt

Lesson_11 - Practice.py

Lesson_11 - Practice.txt

output.csv

reasons.txt

External Libraries

Scratches and Consoles

Git

Run

TODO

Problems

Terminal

Python Packages

Python Console

```
33
32 def task_03():
31     print("=====\\nTask 3\\n=====")
30     name = input('Please tell me your name: ')
29     if name:
28         with open('guest.txt', "a", encoding="utf-8") as output_file:
27             output_file.write(name + '\\n')
26             output_file.close()
25
24
23 def task_04():
22     print("=====\\nTask 4\\n=====")
21     name = '*'
20     while name:
19         name = input('Please tell me your name (leave empty to exit): ')
18         if name:
17             print(f"Hello {name}, welcome to this program, your name will be recorded as a guest")
16             with open('guest.txt', "a", encoding="utf-8") as output_file:
15                 output_file.write(name + '\\n')
14                 output_file.close()
13
12
11 def task_05():
10     print("=====\\nTask 5\\n=====")
9     reason = '*'
8     while reason:
7         reason = input('Please tell me a reason you love programming (leave empty to exit): ')
6         if reason:
5             with open('reasons.txt', "a", encoding="utf-8") as output_file:
4                 output_file.write(reason + '\\n')
3                 output_file.close()
2
1
79 class Credential:
1     def __init__(self, string_line: str):
2         parts = string_line.split(',')
3         self.name = parts[0]
4         self.password = parts[1]
5
6     def validate(self, name: str, password: str) -> bool:
7         return (self.name == name) & (self.password == password)
8
9
10 def interesting_task():
11     print("=====\\nInteresting Task\\n=====")
```

Database

ScView

79:17

CRLF

UTF-8

4 spaces

Python 3.9 (20210804)

main

20210804 - Lesson_11 - Practice.py

Lesson_11 - Practice

Lesson_11 - Practice.py x

credentials.txt x

Project

20210804 C:\Users\diegoortizmatajira\Documents\Personal\python-learning\cla

venv library root

Class task.py

credentials.txt

guest.txt

Lesson_11 - Practice.py

Lesson_11 - Practice.txt

output.csv

reasons.txt

External Libraries

Scratches and Consoles

5

4

3

2

1

79

1

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with open('reasons.txt', "a", encoding="utf-8") as output_file:

output_file.write(reason + '\n')

output_file.close()

class Credential:

def __init__(self, string_line: str):

parts = string_line.split(',')

self.name = parts[0]

self.password = parts[1]

def validate(self, name: str, password: str) -> bool:

return (self.name == name) & (self.password == password)

def interesting_task():

print("===== \nInteresting Task\n===== ")

credentials: list[Credential] = []

with open('credentials.txt', "r", encoding="utf-8") as input_file:

lines = input_file.readlines()

for line in lines:

credentials.append(Credential(line.strip('\n\r')))

input_file.close()

name = input('Please enter your username: ')

password = input('Please enter your password: ')

for user in credentials:

if user.validate(name, password):

print("User authenticated")

return

else:

print("User not authenticated")

task_01()

task_02()

task_03()

task_04()

task_05()

interesting_task()

Credential

Git

Run

TODO

Problems

Terminal

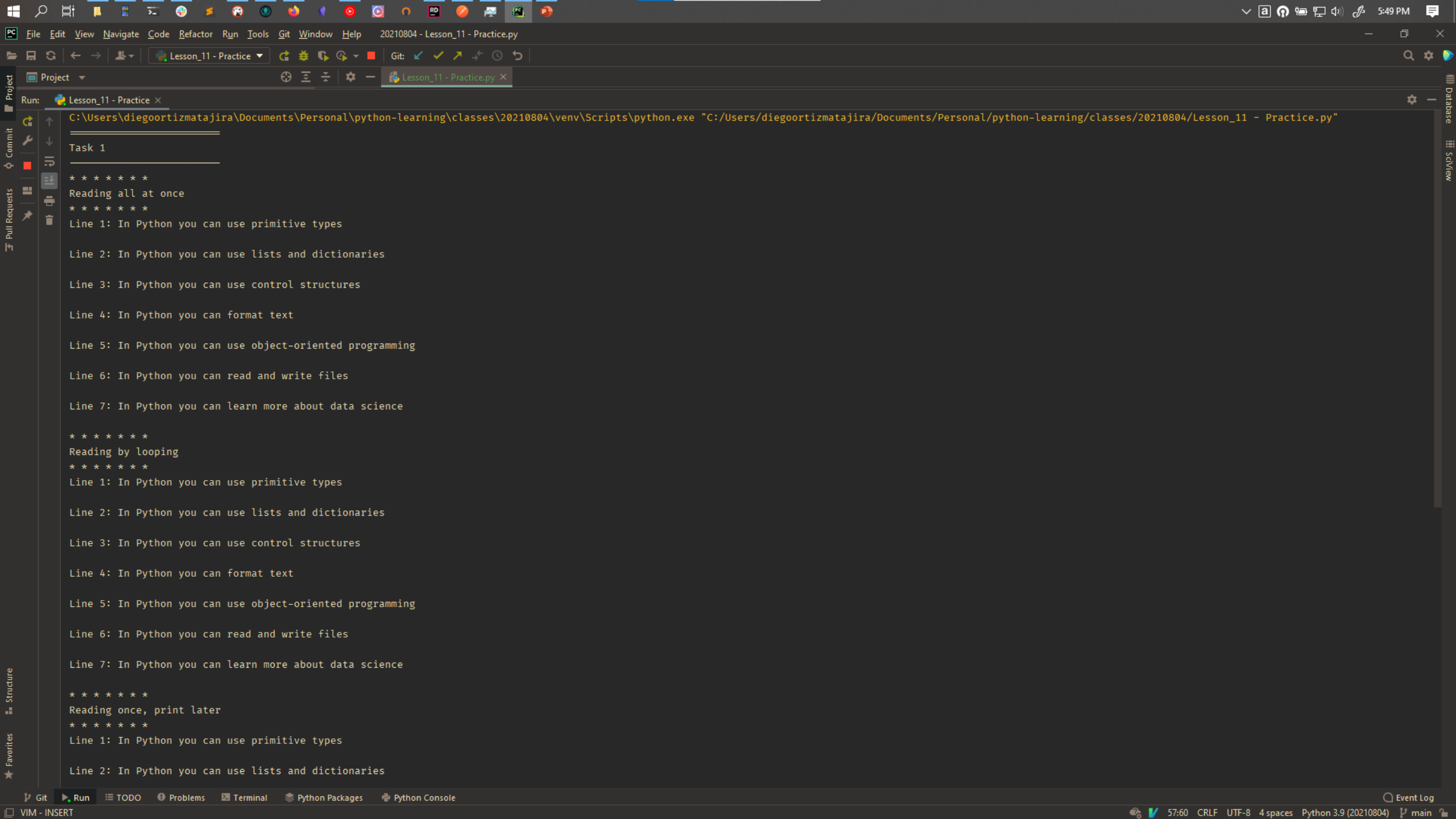
Python Packages

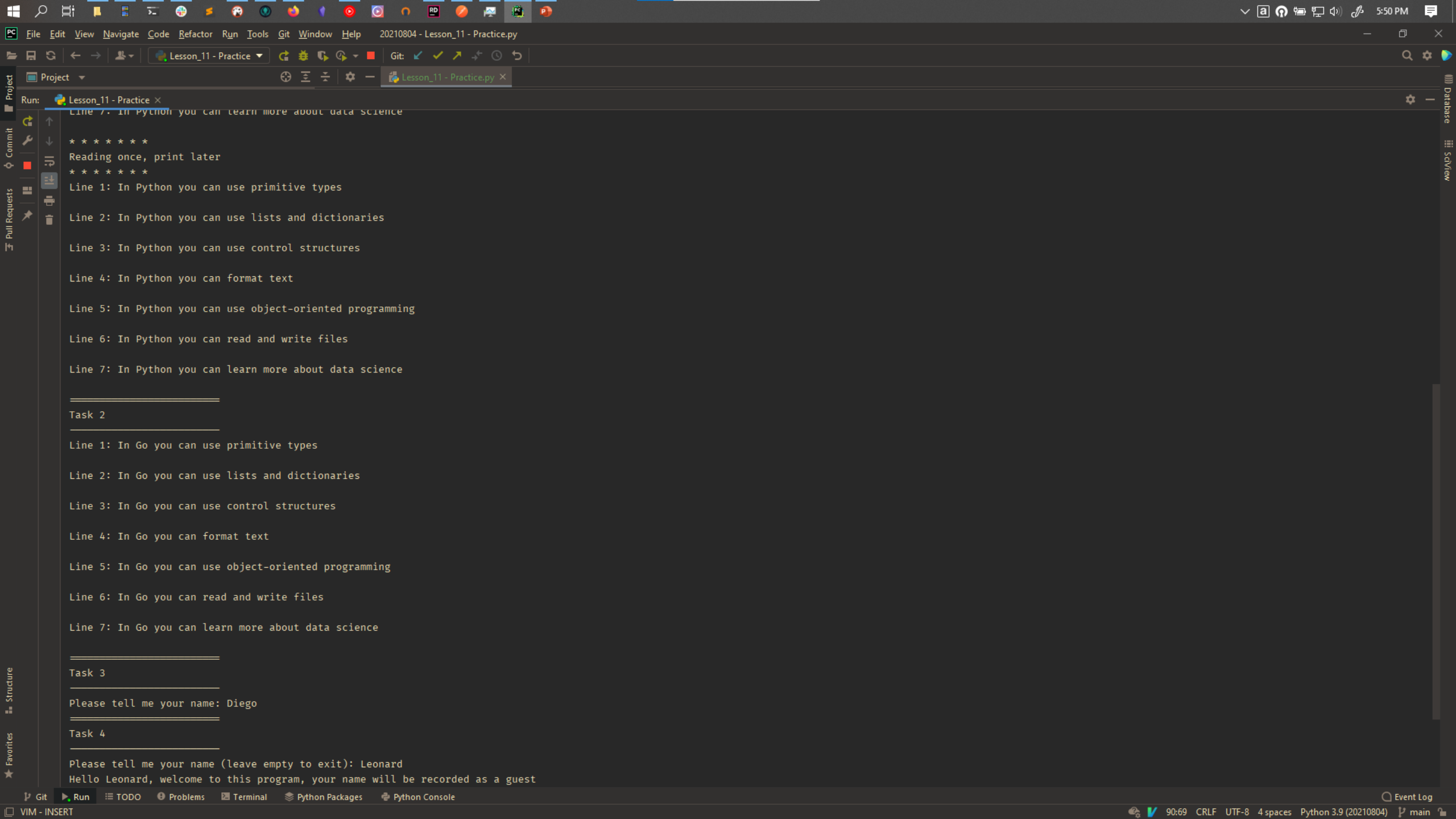
Python Console

Event Log

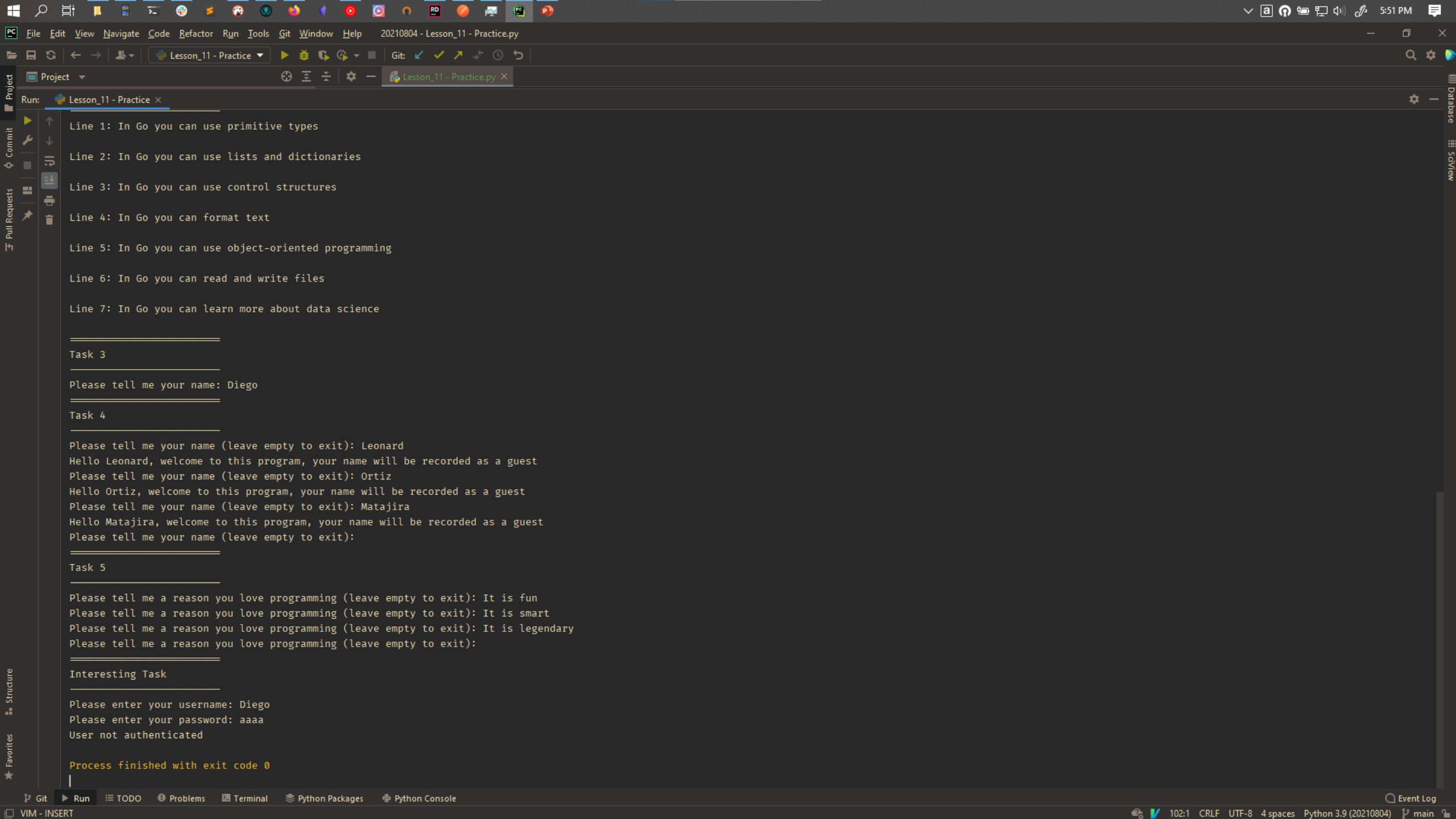
79:17 CRLF UTF-8 4 spaces Python 3.9 (20210804) main

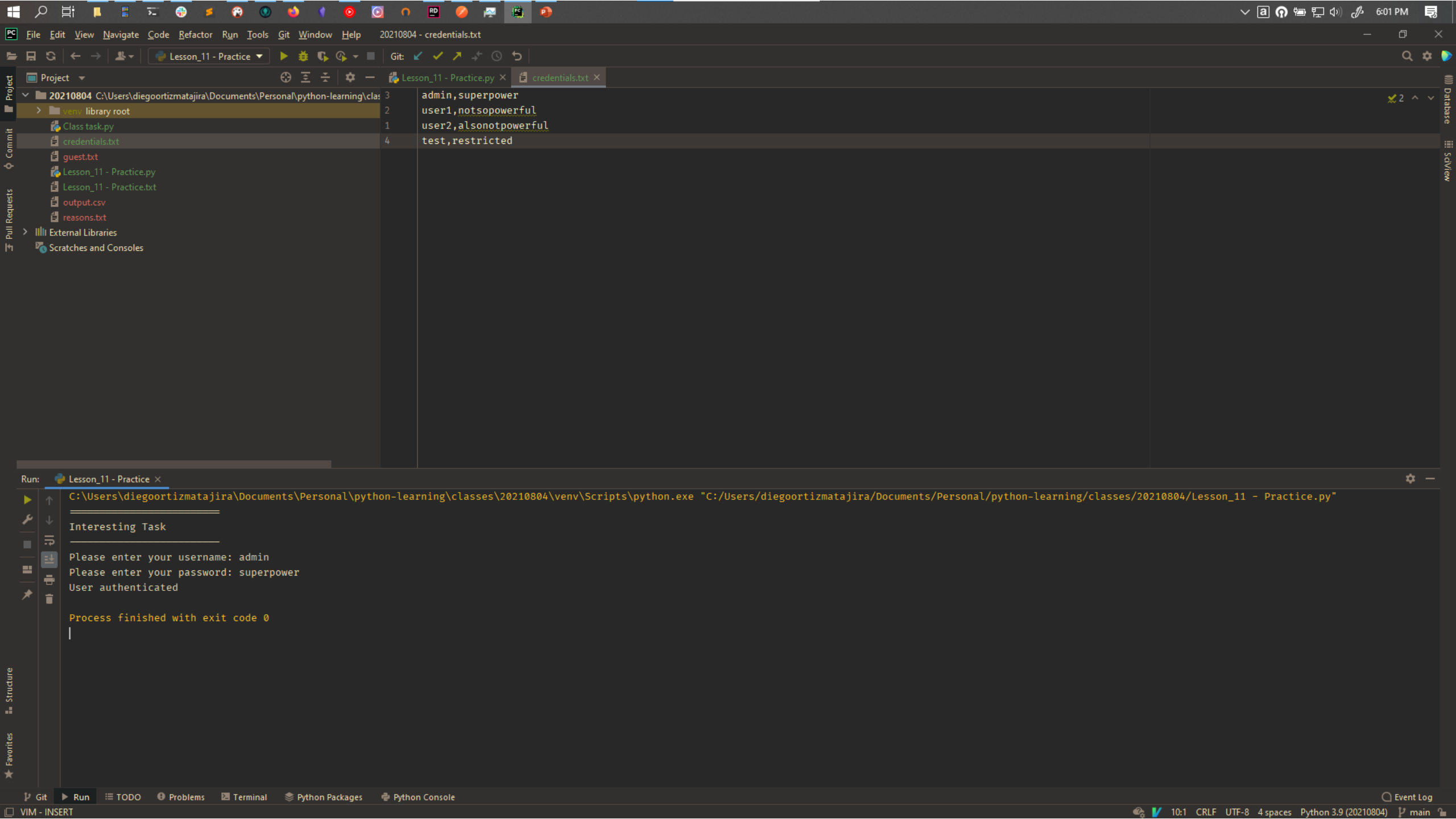
Practice - Execution





```
File Edit View Navigate Code Refactor Run Tools Git Window Help 20210804 - Lesson_11 - Practice.py
Lesson_11 - Practice
Lesson_11 - Practice.py x
Run: Lesson_11 - Practice x
Line 7: In Python you can learn more about data science
* * * * *
Reading once, print later
* * * * *
Line 1: In Python you can use primitive types
Line 2: In Python you can use lists and dictionaries
Line 3: In Python you can use control structures
Line 4: In Python you can format text
Line 5: In Python you can use object-oriented programming
Line 6: In Python you can read and write files
Line 7: In Python you can learn more about data science
=====
Task 2
=====
Line 1: In Go you can use primitive types
Line 2: In Go you can use lists and dictionaries
Line 3: In Go you can use control structures
Line 4: In Go you can format text
Line 5: In Go you can use object-oriented programming
Line 6: In Go you can read and write files
Line 7: In Go you can learn more about data science
=====
Task 3
=====
Please tell me your name: Diego
=====
Task 4
=====
Please tell me your name (leave empty to exit): Leonard
Hello Leonard, welcome to this program, your name will be recorded as a guest
Git Run TODO Problems Terminal Python Packages Python Console
VIM - INSERT 90:69 CRLF UTF-8 4 spaces Python 3.9 (20210804) main
```





Project

20210804 C:\Users\diegoortizmatajira\Documents\Personal\python-learning\clas

venv library root

Class task.py

credentials.txt

guest.txt

Lesson_11 - Practice.py

Lesson_11 - Practice.txt

output.csv

reasons.txt

External Libraries

Scratches and Consoles

20210804 - output.csv

Lesson_11 - Practice

git

reasons.txt

output.csv

4

Diego

1

3

It is fun

12

Employee_FName,Employee_LName,EmployeeID,Employee_Salary

3

Leonard

2

2

It is smart

11

First0,First0,20210,0

2

Ortiz

1

1

It is legendary

10

First1,First1,20211,5000

1

Matajira

4

9

8

First2,First2,20212,10000

5

8

First3,First3,20213,15000

7

First4,First4,20214,20000

6

First5,First5,20215,25000

5

First6,First6,20216,30000

4

First7,First7,20217,35000

3

First8,First8,20218,40000

2

First9,First9,20219,45000

1

First10,First10,202110,50000

13

Text

Data

Git

Run

TODO

Problems

Terminal

Python Packages

Python Console

Event Log

13:1

CRLF

UTF-8

4 spaces

Python 3.9 (20210804)

main

