

Python Day4 Assessment

Day 4: Python File Handling and OOP

Task 1: Write a Python program to read a file and print its content line by line.

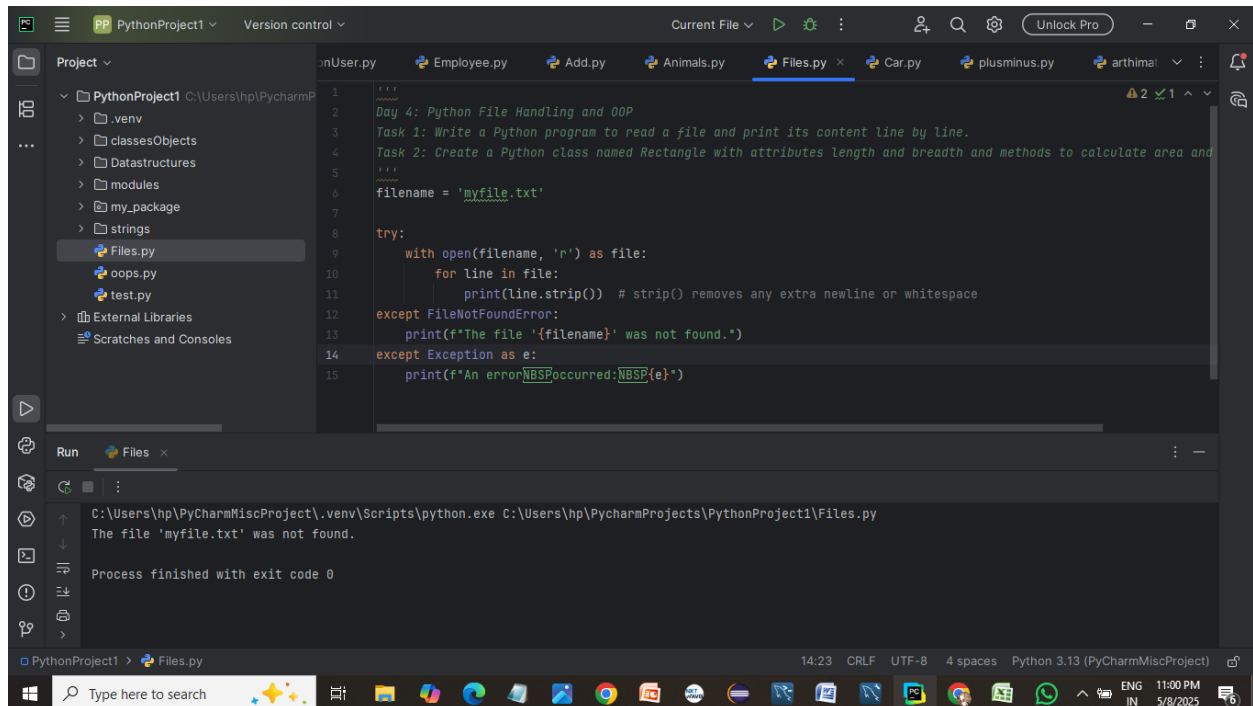
Task 2: Create a Python class named Rectangle with attributes length and breadth and methods to calculate area and perimeter.

Task1:

```
filename = 'myfile.txt'

try:
    with open(filename, 'r') as file:
        for line in file:
            print(line.strip()) # strip() removes any extra newline or
                                whitespace
except FileNotFoundError:
    print(f"The file '{filename}' was not found.")
except Exception as e:
    print(f"An error occurred: {e}")
```

output)



```
PythonProject1
├── .venv
├── classesObjects
├── Datastructures
├── modules
├── my_package
├── strings
├── Files.py
├── oops.py
├── test.py
├── External Libraries
└── Scratches and Consoles
```

```
1  """
2  Day 4: Python File Handling and OOP
3  Task 1: Write a Python program to read a file and print its content line by line.
4  Task 2: Create a Python class named Rectangle with attributes length and breadth and methods to calculate area and
5  """
6  filename = 'myfile.txt'
7
8  try:
9      with open(filename, 'r') as file:
10         for line in file:
11             print(line.strip()) # strip() removes any extra newline or whitespace
12 except FileNotFoundError:
13     print(f"The file '{filename}' was not found.")
14 except Exception as e:
15     print(f"An error occurred: {e}")
```

```
C:\Users\hp\PyCharmMiscProject\.venv\Scripts\python.exe C:\Users\hp\PyCharmProjects\PythonProject1\Files.py
The file 'myfile.txt' was not found.

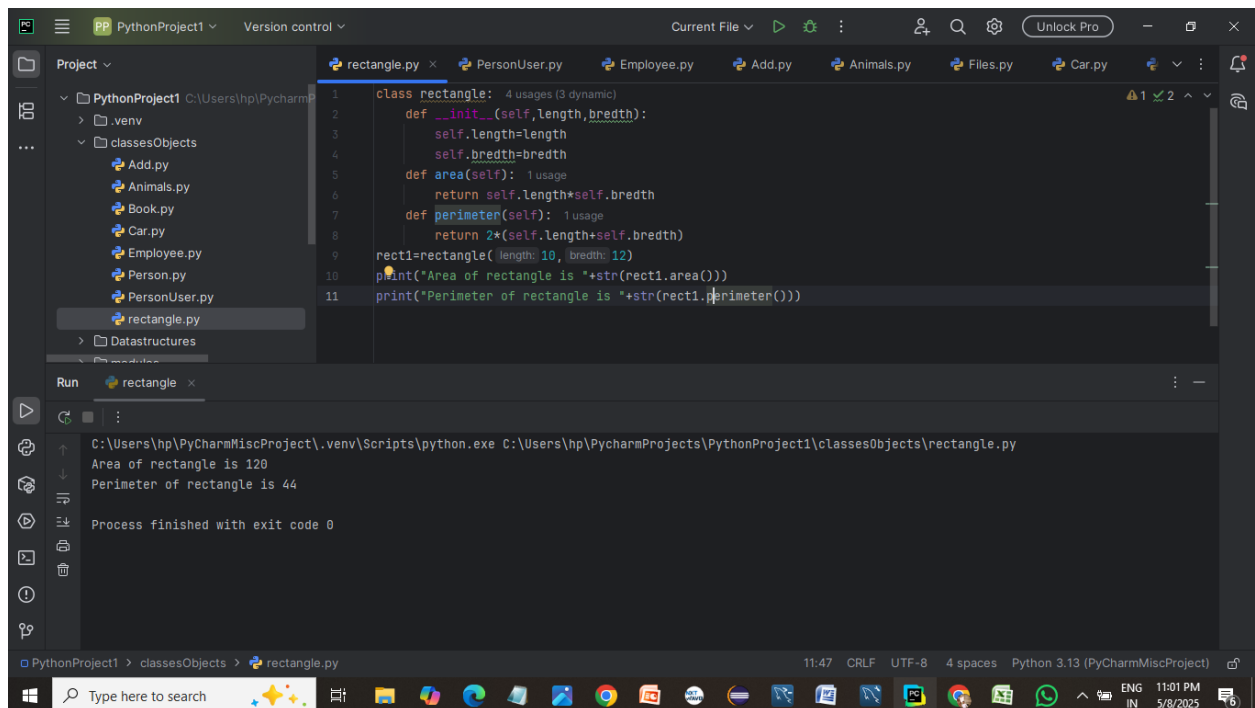
Process finished with exit code 0
```

PythonProject1 > Files.py 14:23 CRLF UTF-8 4 spaces Python 3.13 (PyCharmMiscProject)

Task2)

```
class rectangle:
    def __init__(self,length,bredth):
        self.length=length
        self.bredth=bredth
    def area(self):
        return self.length*self.bredth
    def perimeter(self):
        return 2*(self.length+self.bredth)
rect1=rectangle(10,12)
print("Area of rectangle is "+str(rect1.area()))
print("Perimeter of rectangle is "+str(rect1.perimeter()))
```

Output)



The screenshot shows the PyCharm IDE interface. The left sidebar displays the project structure for 'PythonProject1', with the 'classesObjects' folder expanded, showing files like 'Add.py', 'Animals.py', 'Book.py', 'Car.py', 'Employee.py', 'Person.py', 'PersonUser.py', and 'rectangle.py'. The main editor window shows the code from 'rectangle.py', which defines a 'rectangle' class with methods for area and perimeter, and creates an instance 'rect1' with length 10 and breadth 12. The bottom panel shows the output of the program: 'Area of rectangle is 120' and 'Perimeter of rectangle is 44'. The status bar at the bottom indicates the file is 'rectangle.py' in the 'classesObjects' directory, using Python 3.13.

```
class rectangle:
    def __init__(self,length,bredth):
        self.length=length
        self.bredth=bredth
    def area(self):
        return self.length*self.bredth
    def perimeter(self):
        return 2*(self.length+self.bredth)
rect1=rectangle(10,12)
print("Area of rectangle is "+str(rect1.area()))
print("Perimeter of rectangle is "+str(rect1.perimeter()))
```

Run console output:

```
C:\Users\hp\PyCharmMiscProject\.venv\Scripts\python.exe C:\Users\hp\PyCharmProjects\PythonProject1\classesObjects\rectangle.py
Area of rectangle is 120
Perimeter of rectangle is 44
Process finished with exit code 0
```