GEO115 PROGRAMMING IN GIS

Topic: Week 3

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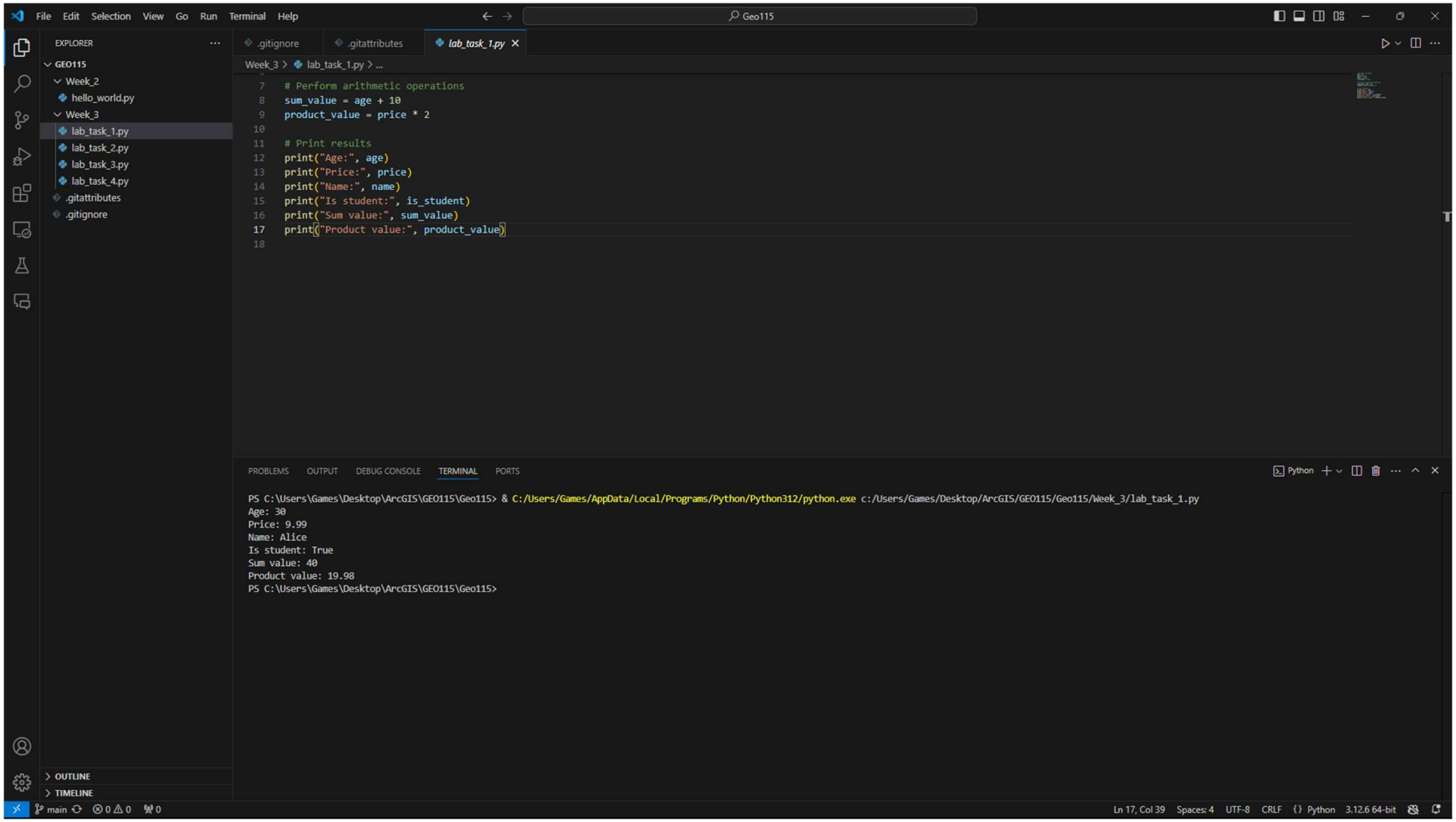
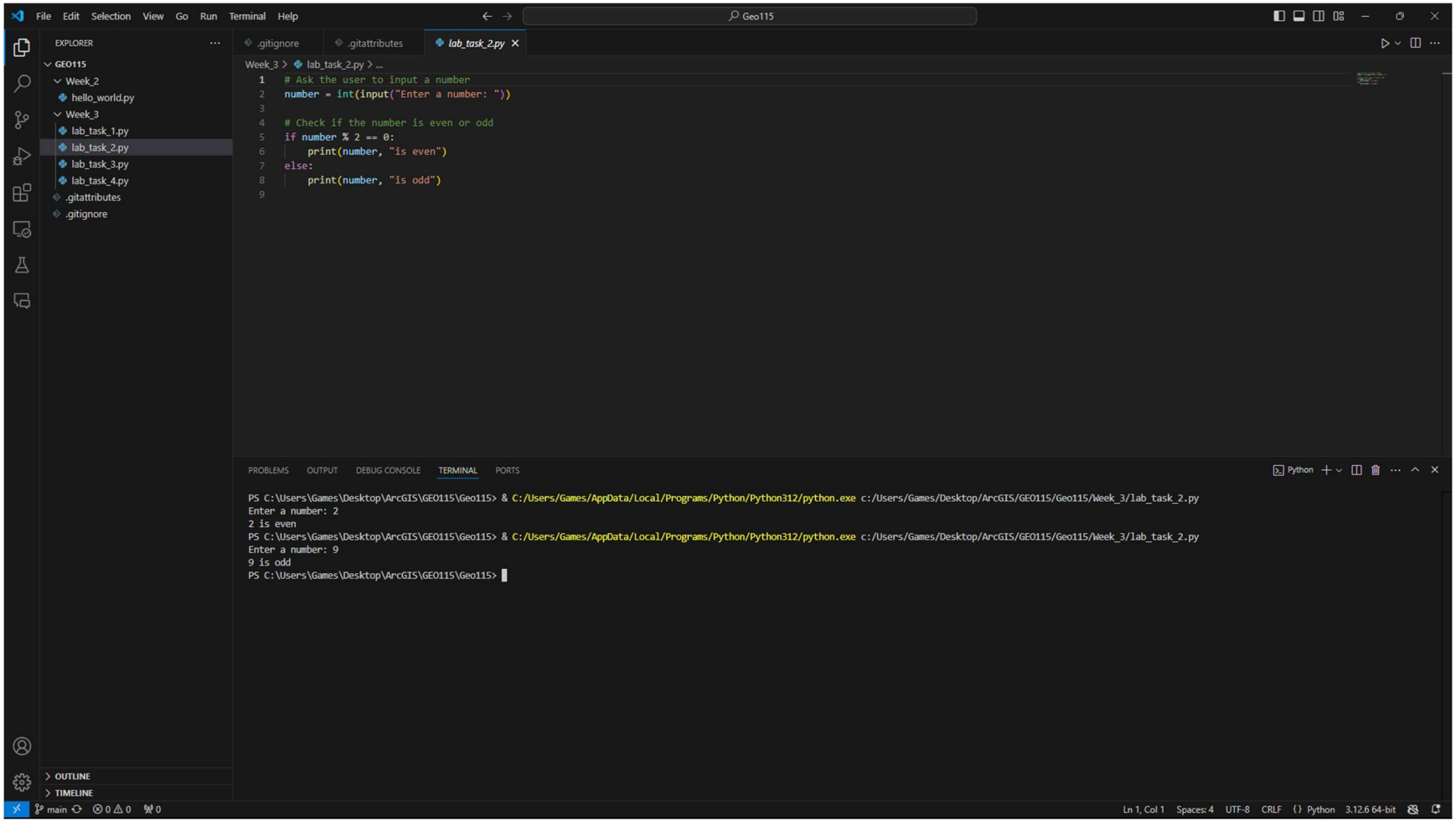
Submitted by: Chetan Chavan

Student Number: A00148718

TASK 1


File Edit Selection View Go Run Terminal Help
Geo115
EXPLORER
GEO115
Week_2
hello_world.py
Week_3
lab_task_1.py
lab_task_2.py
lab_task_3.py
lab_task_4.py
.gitattributes
.gitignore
.gitignore
.gitattributes
lab_task_1.py
Week_3 > lab_task_1.py > ...
7 # Perform arithmetic operations
8 sum_value = age + 10
9 product_value = price * 2
10
11 # Print results
12 print("Age:", age)
13 print("Price:", price)
14 print("Name:", name)
15 print("Is student:", is_student)
16 print("Sum value:", sum_value)
17 print("Product value:", product_value)
18
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Python
PS C:\Users\Games\Desktop\ArcGIS\GEO115\Geo115> & C:/Users/Games/AppData/Local/Programs/Python/Python312/python.exe c:/Users/Games/Desktop/ArcGIS/GEO115/Geo115/Week_3/lab_task_1.py
Age: 30
Price: 9.99
Name: Alice
Is student: True
Sum value: 40
Product value: 19.98
PS C:\Users\Games\Desktop\ArcGIS\GEO115\Geo115>
OUTLINE
TIMELINE
main
Ln 17, Col 39 Spaces: 4 UTF-8 CRLF Python 3.12.6 64-bit

TASK 2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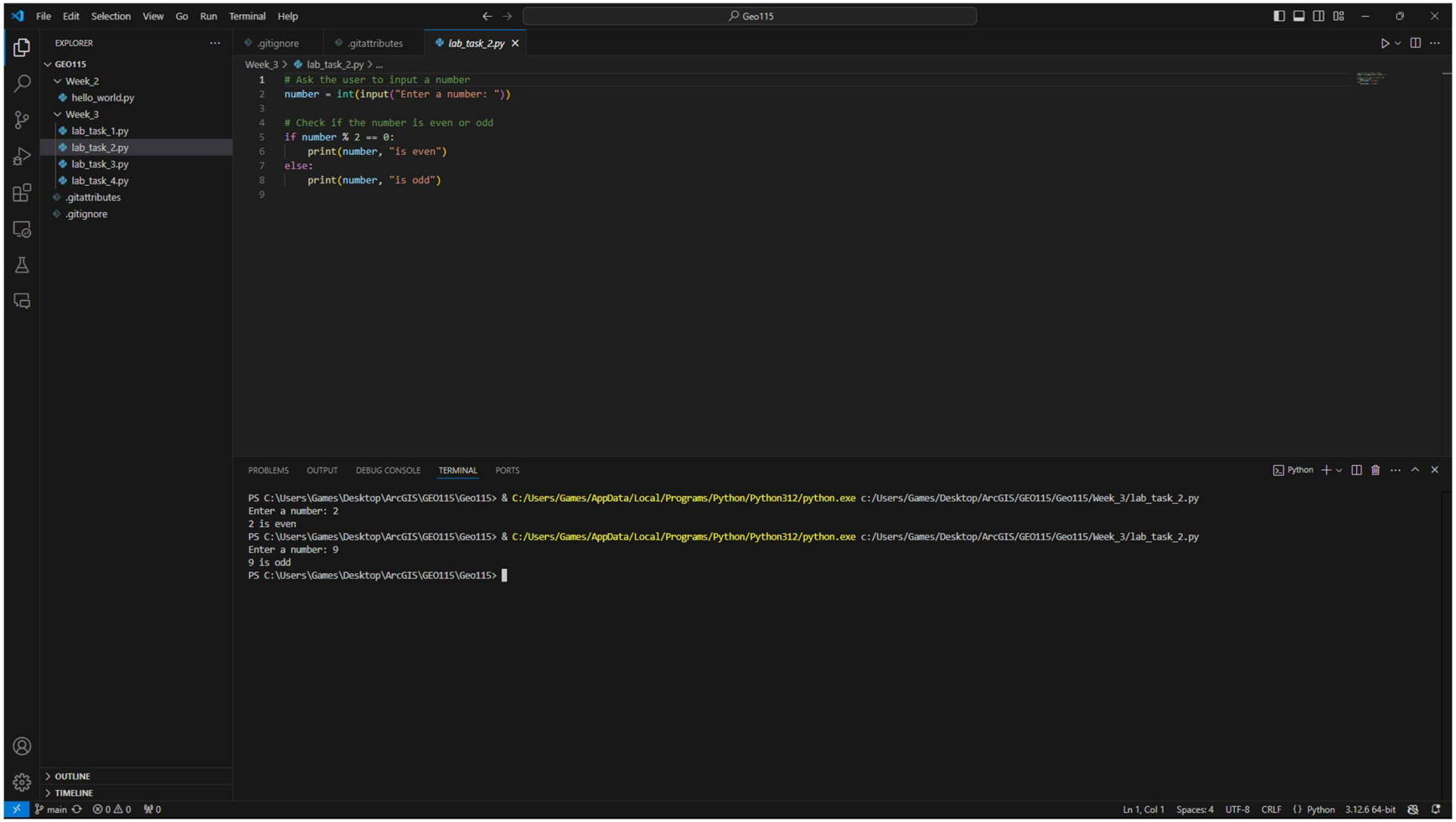
.gitignore
.gitignore
.gitattributes
lab_task_2.py
Week_3 > lab_task_2.py > ...
1 # Ask the user to input a number
2 number = int(input("Enter a number: "))
3
4 # Check if the number is even or odd
5 if number % 2 == 0:
6 print(number, "is even")
7 else:
8 print(number, "is odd")
9
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Python
PS C:\Users\Games\Desktop\ArcGIS\GEO115\Geo115> & C:/Users/Games/AppData/Local/Programs/Python/Python312/python.exe c:/Users/Games/Desktop/ArcGIS/GEO115/Geo115/Week_3/lab_task_2.py
Enter a number: 2
2 is even
PS C:\Users\Games\Desktop\ArcGIS\GEO115\Geo115> & C:/Users/Games/AppData/Local/Programs/Python/Python312/python.exe c:/Users/Games/Desktop/ArcGIS/GEO115/Geo115/Week_3/lab_task_2.py
Enter a number: 9
9 is odd
PS C:\Users\Games\Desktop\ArcGIS\GEO115\Geo115>
OUTLINE
TIMELINE
main
Ln 1, Col 1 Spaces: 4 UTF-8 CRLF Python 3.12.6 64-bit

TASK 3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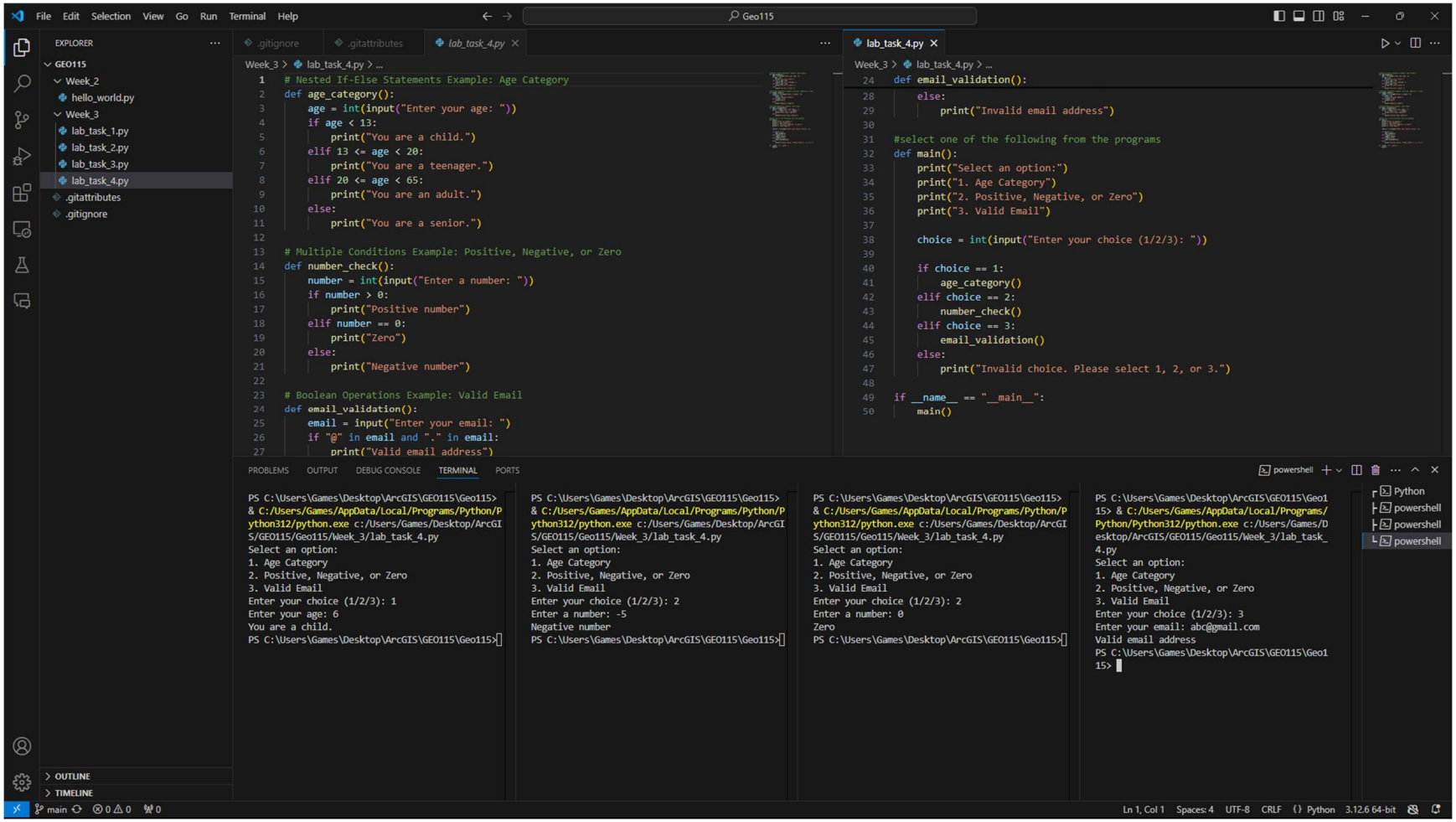
lab_task_2.py
Week_3 > lab_task_2.py > ...
# Ask the user to input a number
number = int(input("Enter a number: "))
# Check if the number is even or odd
if number % 2 == 0:
print(number, "is even")
else:
print(number, "is odd")
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Python
PS C:\Users\Games\Desktop\ArcGIS\GEO115\Geo115> & C:/Users/Games/AppData/Local/Programs/Python/Python312/python.exe c:/Users/Games/Desktop/ArcGIS/GEO115/Geo115/Week_3/lab_task_2.py
Enter a number: 2
2 is even
PS C:\Users\Games\Desktop\ArcGIS\GEO115\Geo115> & C:/Users/Games/AppData/Local/Programs/Python/Python312/python.exe c:/Users/Games/Desktop/ArcGIS/GEO115/Geo115/Week_3/lab_task_2.py
Enter a number: 9
9 is odd
PS C:\Users\Games\Desktop\ArcGIS\GEO115\Geo115>
OUTLINE
TIMELINE
main
Ln 1, Col 1 Spaces: 4 UTF-8 CRLF Python 3.12.6 64-bit

TASK 4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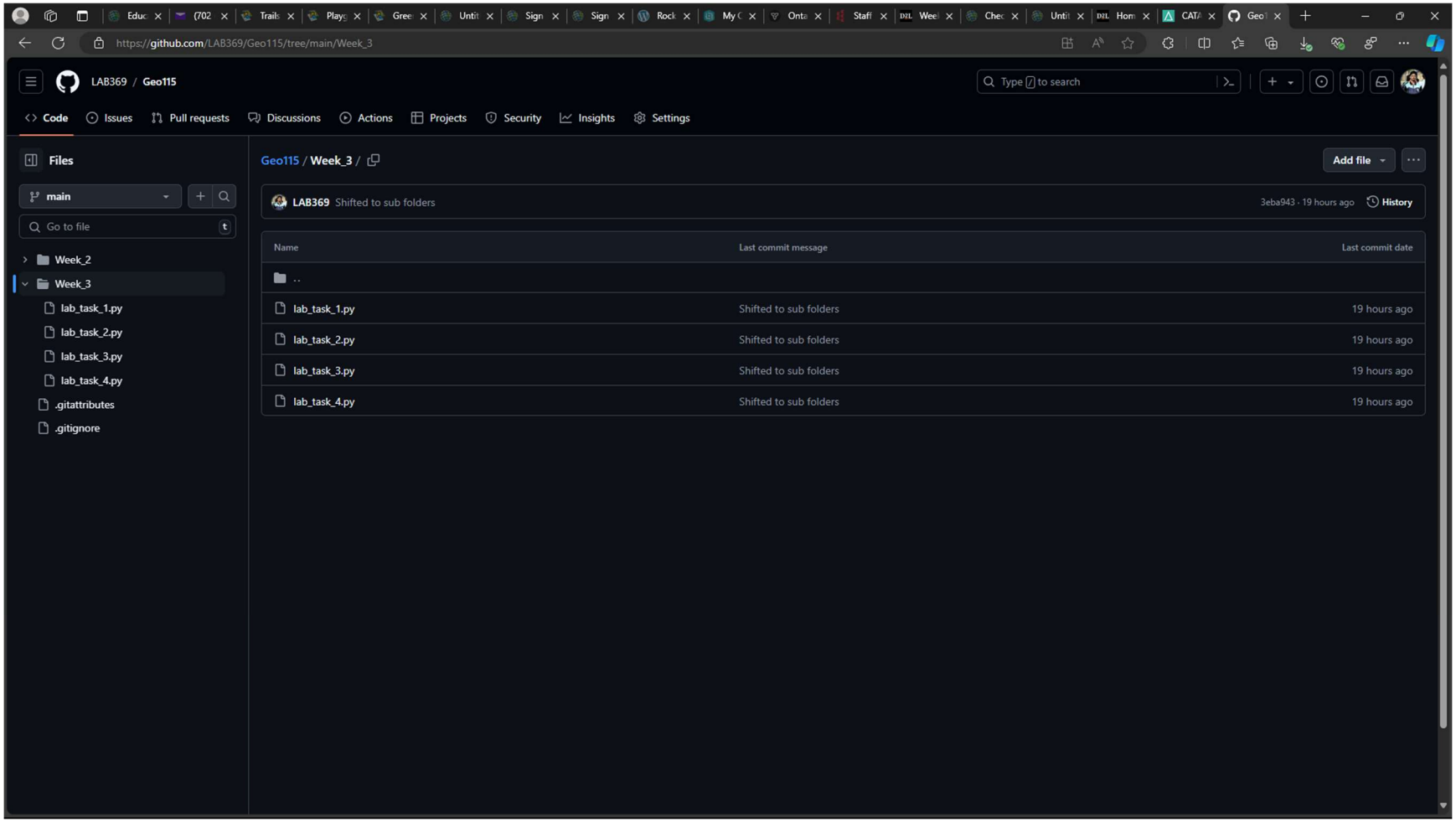
.gitignore
OUTLINE
TIMELINE
.gitignore
.gitattributes
lab_task_4.py
Week_3 > lab_task_4.py > ...
# Nested If-Else Statements Example: Age Category
def age_category():
age = int(input("Enter your age: "))
if age < 13:
print("You are a child.")
elif 13 <= age < 20:
print("You are a teenager.")
elif 20 <= age < 65:
print("You are an adult.")
else:
print("You are a senior.")
# Multiple Conditions Example: Positive, Negative, or Zero
def number_check():
number = int(input("Enter a number: "))
if number > 0:
print("Positive number")
elif number == 0:
print("Zero")
else:
print("Negative number")
# Boolean Operations Example: Valid Email
def email_validation():
email = input("Enter your email: ")
if "@" in email and "." in email:
print("Valid email address")
else:
print("Invalid email address")
#select one of the following from the programs
def main():
print("Select an option:")
print("1. Age Category")
print("2. Positive, Negative, or Zero")
print("3. Valid Email")
choice = int(input("Enter your choice (1/2/3): "))
if choice == 1:
age_category()
elif choice == 2:
number_check()
elif choice == 3:
email_validation()
else:
print("Invalid choice. Please select 1, 2, or 3.")
if __name__ == "__main__":
main()
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
powershell
PS C:\Users\Games\Desktop\ArcGIS\GEO115\Geo115> & C:/Users/Games/AppData/Local/Programs/Python/Python312/python.exe c:/Users/Games/Desktop/ArcGIS/GEO115/Geo115/Week_3/lab_task_4.py
Select an option:
1. Age Category
2. Positive, Negative, or Zero
3. Valid Email
Enter your choice (1/2/3): 1
Enter your age: 6
You are a child.
PS C:\Users\Games\Desktop\ArcGIS\GEO115\Geo115>
PS C:\Users\Games\Desktop\ArcGIS\GEO115\Geo115> & C:/Users/Games/AppData/Local/Programs/Python/Python312/python.exe c:/Users/Games/Desktop/ArcGIS/GEO115/Geo115/Week_3/lab_task_4.py
Select an option:
1. Age Category
2. Positive, Negative, or Zero
3. Valid Email
Enter your choice (1/2/3): 2
Enter a number: -5
Negative number
PS C:\Users\Games\Desktop\ArcGIS\GEO115\Geo115>
PS C:\Users\Games\Desktop\ArcGIS\GEO115\Geo115> & C:/Users/Games/AppData/Local/Programs/Python/Python312/python.exe c:/Users/Games/Desktop/ArcGIS/GEO115/Geo115/Week_3/lab_task_4.py
Select an option:
1. Age Category
2. Positive, Negative, or Zero
3. Valid Email
Enter your choice (1/2/3): 2
Enter a number: 0
Zero
PS C:\Users\Games\Desktop\ArcGIS\GEO115\Geo115>
PS C:\Users\Games\Desktop\ArcGIS\GEO115\Geo115> & C:/Users/Games/AppData/Local/Programs/Python/Python312/python.exe c:/Users/Games/Desktop/ArcGIS/GEO115/Geo115/Week_3/lab_task_4.py
Select an option:
1. Age Category
2. Positive, Negative, or Zero
3. Valid Email
Enter your choice (1/2/3): 3
Enter your email: abc@gmail.com
Valid email address
PS C:\Users\Games\Desktop\ArcGIS\GEO115\Geo115>
Python
powershell
powershell
powershell
main
Ln 1, Col 1 Spaces: 4 UTF-8 CRLF Python 3.12.6 64-bit

GitHub Push


https://github.com/LAB369/Geo115/tree/main/Week_3
LAB369 / Geo115
Type / to search
Code
Issues
Pull requests
Discussions
Actions
Projects
Security
Insights
Settings
Files
main
Go to file
Week_2
Week_3
lab_task_1.py
lab_task_2.py
lab_task_3.py
lab_task_4.py
.gitattributes
.gitignore
Geo115 / Week_3 /
Add file
LAB369 Shifted to sub folders
3eba943 · 19 hours ago
History
Name
Last commit message
Last commit date
..
lab_task_1.py Shifted to sub folders 19 hours ago
lab_task_2.py Shifted to sub folders 19 hours ago
lab_task_3.py Shifted to sub folders 19 hours ago
lab_task_4.py Shifted to sub folders 19 hours ago