

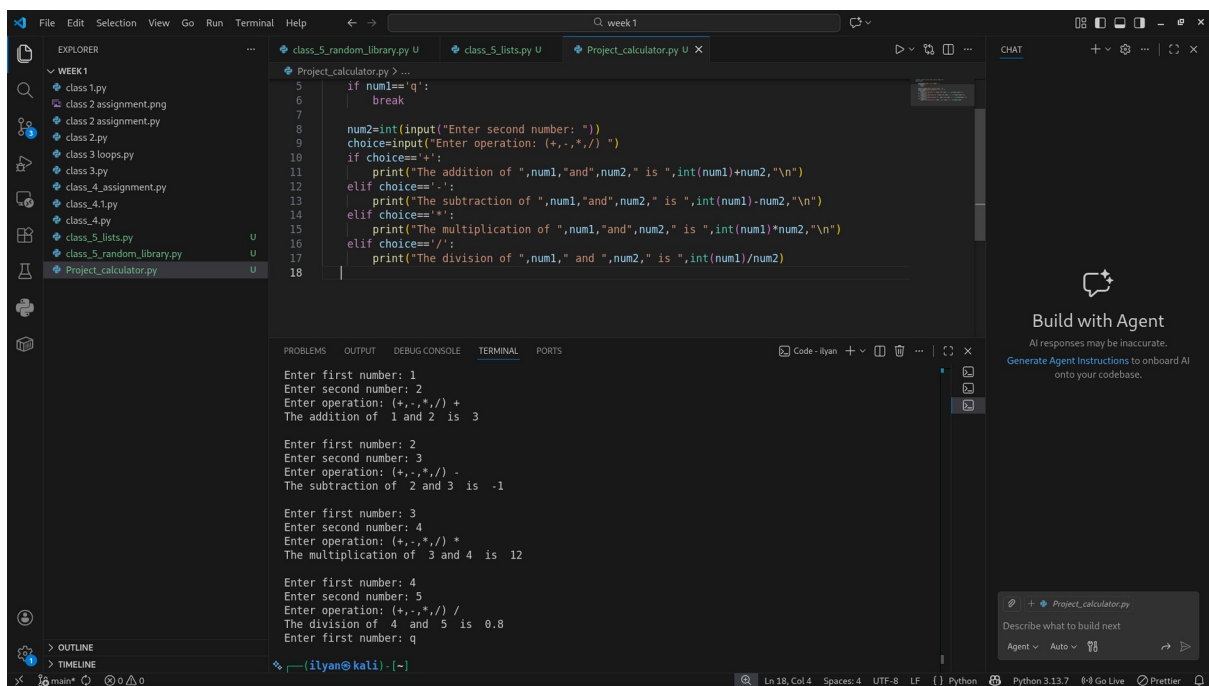
Python Mega Projects

Mega Project 1 - Simple Calculator

Python code:

```
# Simple Calculator by Ilyan khan serial number: 20
while True:
    num1=input("Enter first number: ")
    if num1=='q':
        break
    num2=int(input("Enter second number: "))
    choice=input("Enter operation: (+,-,*,/) ")
    if choice=='+':
        print("The addition of ",num1,"and",num2," is ",int(num1)+num2,"\n")
    elif choice=='-':
        print("The subtraction of ",num1,"and",num2," is ",int(num1)-num2,"\n")
    elif choice=='*':
        print("The multiplication of ",num1,"and",num2," is ",int(num1)*num2,"\n")
    elif choice=='/':
        print("The division of ",num1," and ",num2," is ",int(num1)/num2)
```

Output:



The screenshot shows a code editor with a file explorer on the left, a code editor in the center, and a terminal at the bottom. The code editor displays the Python code for a simple calculator. The terminal shows the output of the program, including prompts for numbers and operations, and the resulting calculations.

```
Enter first number: 1
Enter second number: 2
Enter operation: (+,-,*,/) +
The addition of 1 and 2 is 3

Enter first number: 2
Enter second number: 3
Enter operation: (+,-,*,/) -
The subtraction of 2 and 3 is -1

Enter first number: 3
Enter second number: 4
Enter operation: (+,-,*,/) *
The multiplication of 3 and 4 is 12

Enter first number: 4
Enter second number: 5
Enter operation: (+,-,*,/) /
The division of 4 and 5 is 0.8

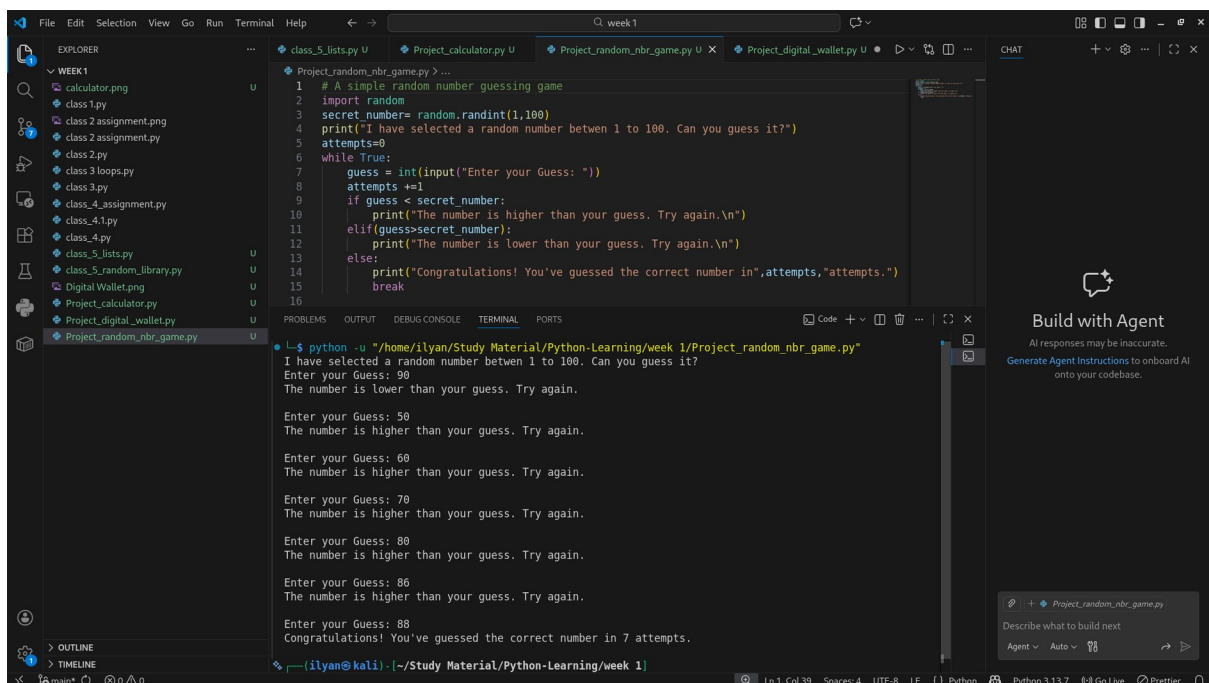
Enter first number: q
```

Mega Project 1 - Random Number Guessing Game

Python code:

```
# A simple random number guessing game by Ilyan khan Serial number: 20
import random
secret_number= random.randint(1,100)
print("I have selected a random number between 1 to 100. Can you guess it?")
attempts=0
while True:
    guess = int(input("Enter your Guess: "))
    attempts +=1
    if guess < secret_number:
        print("The number is higher than your guess. Try again.\n")
    elif(guess>secret_number):
        print("The number is lower than your guess. Try again.\n")
    else:
        print("Congratulations! You've guessed the correct number
in",attempts,"attempts.")
        break
```

Output:



The screenshot shows a Visual Studio Code editor with a file explorer on the left, a code editor in the center, and a terminal at the bottom. The file explorer shows a project named 'week1' with several files. The code editor displays the Python code for a random number guessing game. The terminal shows the output of the program, which is a random number guessing game. The user enters guesses of 90, 50, 60, 70, 80, 86, and 88. The program outputs feedback for each guess and finally congratulates the user for guessing the correct number (88) in 7 attempts.

```
1 # A simple random number guessing game
2 import random
3 secret_number= random.randint(1,100)
4 print("I have selected a random number between 1 to 100. Can you guess it?")
5 attempts=0
6 while True:
7     guess = int(input("Enter your Guess: "))
8     attempts +=1
9     if guess < secret_number:
10         print("The number is higher than your guess. Try again.\n")
11     elif(guess>secret_number):
12         print("The number is lower than your guess. Try again.\n")
13     else:
14         print("Congratulations! You've guessed the correct number in",attempts,"attempts.")
15         break
16
```

```
python -u "/home/ilyan/Study Material/Python-Learning/week 1/Project_random_nbr_game.py"
I have selected a random number between 1 to 100. Can you guess it?
Enter your Guess: 90
The number is lower than your guess. Try again.

Enter your Guess: 50
The number is higher than your guess. Try again.

Enter your Guess: 60
The number is higher than your guess. Try again.

Enter your Guess: 70
The number is higher than your guess. Try again.

Enter your Guess: 80
The number is higher than your guess. Try again.

Enter your Guess: 86
The number is higher than your guess. Try again.

Enter your Guess: 88
Congratulations! You've guessed the correct number in 7 attempts.
```

Mega Project 3 - Digital wallet

Python code:

```
# Digital Wallet Project by Ilyan khan Serial Number:20
amount_list=[]
reason_list=[]
while True:
    print("Digital wallet options: ")
    print("1. Add amount and reason.\n2. View Total amount and reasons.\n3. Exit.")
    choice=int(input("Enter your choice: "))
    if choice==1:
        amount=int(input("Enter the amount to add: "))
        reason=input("Enter the reason for this amount: ")
        amount_list.append(amount)
        reason_list.append(reason)
        print("Amount added successfully.\n")
    elif(choice==2):
        total=sum(amount_list)
        print("Total amount in wallet: ",total)
        print("Reasons for amounts added: ",reason_list)
    elif(choice==3):
        print("Exiting the digital wallet.")
        break
    else:
        print("Invalid choice. Please try again.\n")
```

Output:

The screenshot displays a VS Code editor window with a Python project named 'Project_digital_wallet.py'. The code defines a 'Digital Wallet Project' with a serial number of 20. It includes a list to store reasons for amounts added and a loop to handle user choices. The terminal shows the execution of the script, which prompts the user for choices and amounts. The interface includes a sidebar with file explorer, a main editor area, and a terminal window.

```

class_5_lists.py u
Project_calculator.py u
Project_random_nbr_game.py u
Project_digital_wallet.py u
Project_digital_wallet.py ...
1 # Digital Wallet Project by Ilyan khan Serial Number:20
2 amount_list=[]
3 reason_list=[]
4 while True:
5     print("Digital wallet options: ")
6     print("1. Add amount and reason.\n2. View Total amount and reasons.\n3. Exit:")
7     choice=int(input("Enter your choice: "))

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Code - Ryan + - - - - -

● $ python -u "/home/ilyan/Study Material/Python-Learning/week 1/Project_digital_wallet.py"
Digital wallet options:
1. Add amount and reason.
2. View Total amount and reasons.
3. Exit.
Enter your choice: 1
Enter the amount to add: 100
Enter the reason for this amount: hello
Amount added successfully.

Digital wallet options:
1. Add amount and reason.
2. View Total amount and reasons.
3. Exit.
Enter your choice: 2
Total amount in wallet: 100
Reasons for amounts added: ['hello']
Digital wallet options:
1. Add amount and reason.
2. View Total amount and reasons.
3. Exit.
Enter your choice: 3
Exiting the digital wallet.

(ilyan@kali) [~]

```