

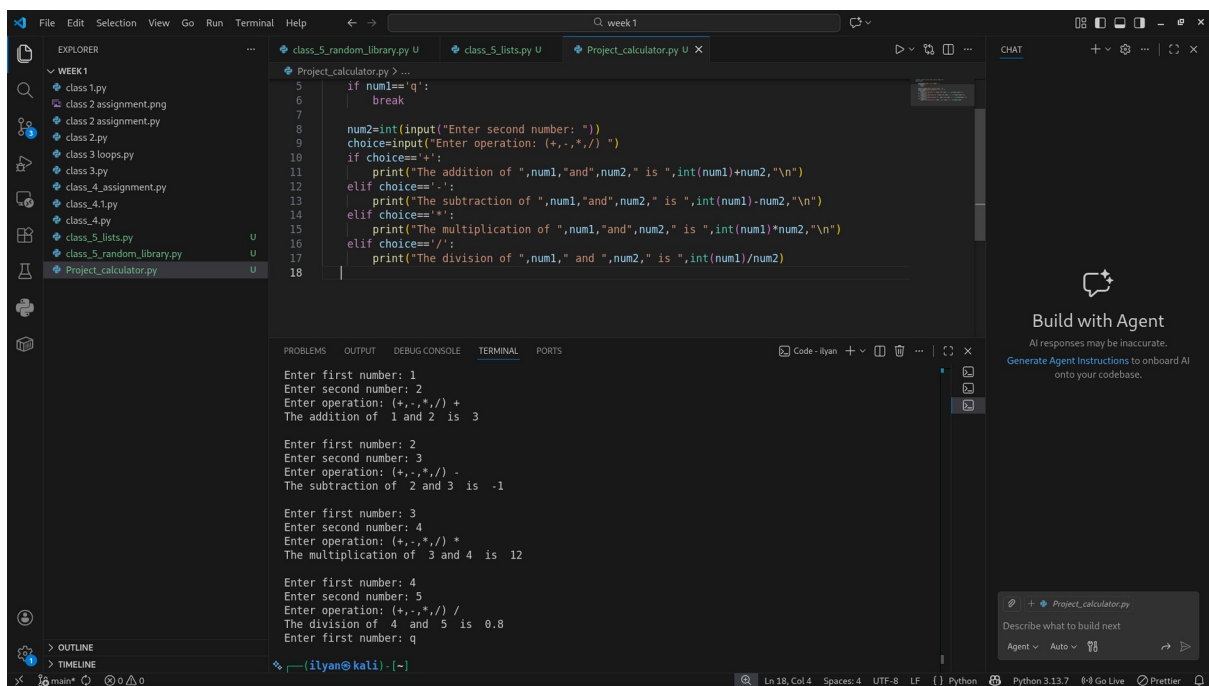
Python Mega Projects

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, which prompts the user to enter a first number, a second number, and an operation. The program then performs the operation and displays the result.

```
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

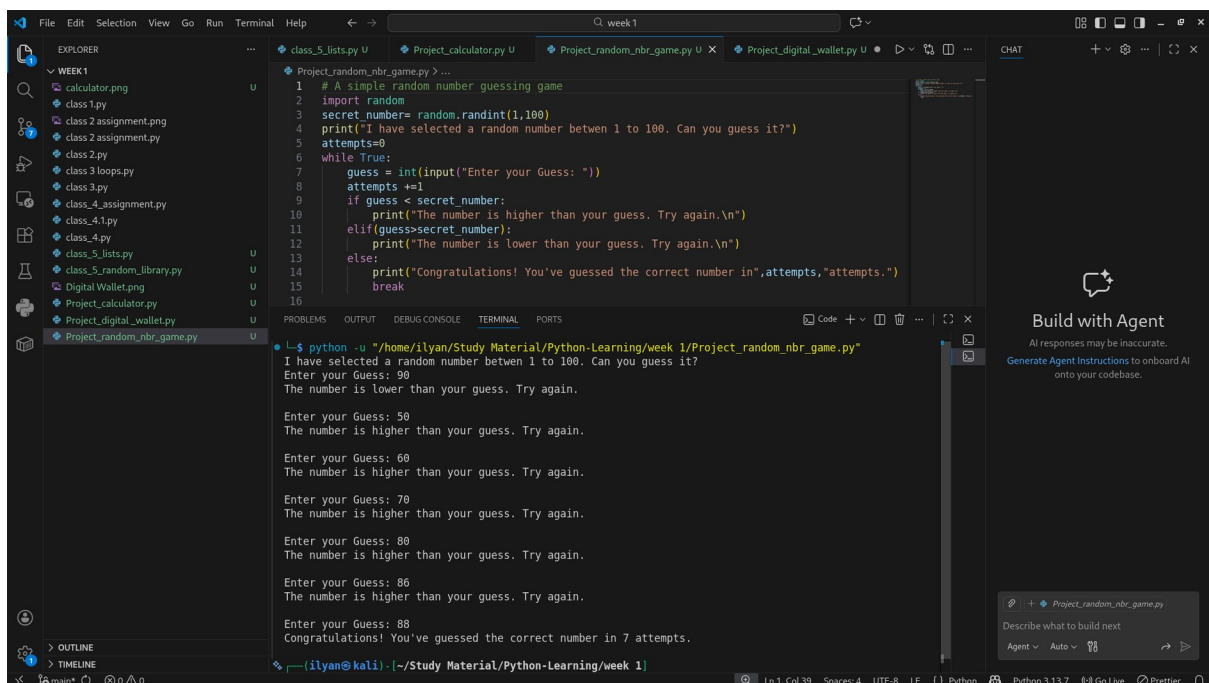
Enter first number: q
```

Mega Project 2 - 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, including the random number selected (90) and the user's guesses (50, 60, 70, 80, 86, 88) with corresponding feedback messages. The program concludes with a congratulatory message after 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 for amounts and a loop that prompts the user to add amounts and view the total. The terminal shows the execution of the script, which prompts the user for their choice and amount. The interface includes a sidebar with file explorer, a main editor area, and a terminal window.