Documentation

Number Guessing Game Documentation

Description

This is a simple number guessing game implemented in Python. The game allows a user to input an upper bound, and then guess a random number generated between 1 and the upper bound. The game provides feedback on whether the guess is too high or too low and counts the number of guesses.

How the Code Works:

1. **Welcome Screen:**

   o   A welcome message is displayed using print statements to make the game feel more interactive.

2. **Upper Bound Input:**

   o   The user is asked to provide a number as an upper bound for the random number to guess. If the input is not a number, the program quits.

3. **Generating a Random Number:**

   o   The program uses Python's random module to generate a random number between 1 and the upper bound provided by the user.

4. **Game Loop:**

   o   The user is prompted to guess the number.

   o   If the guess is incorrect, feedback is given ("too low" or "too high"), and the number of guesses is tracked.

   o   If the guess is correct, the game ends with a congratulatory message showing the number of attempts taken.

5. **Input Validation:**

   o   The game ensures that the user's input is a valid number.

6. **End of Game:**

   o   The program prints the total number of guesses the user made before getting the correct answer.

Code Breakdown:

- import random: Imports the random module to generate random numbers.

- input(): Takes user input for the upper bound and guesses.

- random.randint(0, top_of_range): Generates a random integer between 1 and the upper bound.

- while True: Creates an infinite loop that continues until the user guesses correctly.

- if __name__ == "__main__":: Ensures the game runs only if the script is executed directly.

Instructions to Run the Game:

1. Clone this repository:

bash

Copy code
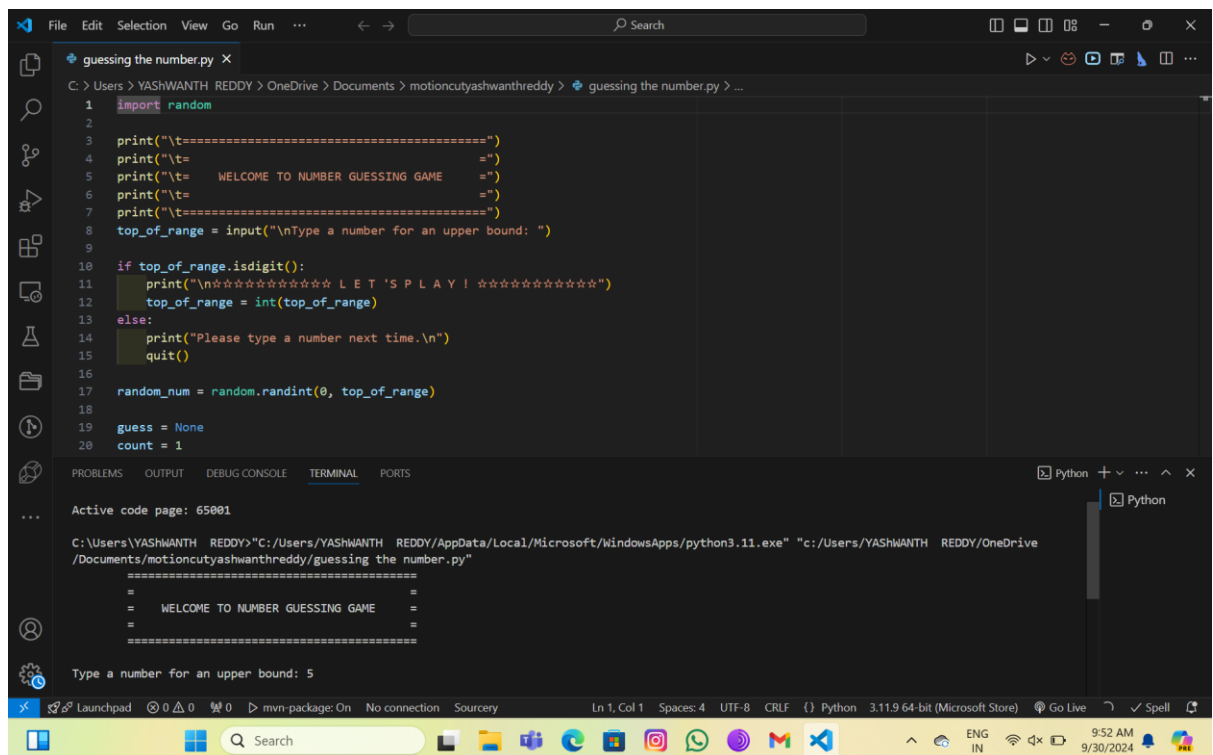
git clone <repository-url>

cd <repository-directory>

2. Ensure you have Python installed (preferably Python 3.x).

3. Run the Python script:

bash

Copy code

python number_guessing_game.py

4. Follow the prompts in the terminal to play the game.

```python
        print("\n☆☆☆☆☆☆☆☆☆☆☆  L E T ' S  P L A Y !  ☆☆☆☆☆☆☆☆☆☆☆☆")
        top_of_range = int(top_of_range)
else:
        print("Please type a number next time.\n")
        quit()

random_num = random.randint(0, top_of_range)

guess = None
count = 1

while True:
        guess = input("\nPlease type a number between 1 and " + str(top_of_
        if guess.isdigit():
                guess = int(guess)

                if guess == random_num:
                        print("\nYou got it!")
                        break
                if guess != random_num:
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
☆☆☆☆☆☆☆☆☆☆☆  L E T ' S  P L A Y !  ☆☆☆☆☆☆☆☆☆☆☆

Please type a number between 1 and 5: 2
Your guess is too high. Try again.

Please type a number between 1 and 5: 1

You got it!
It took you 2 guess/guesses!

C:\Users\YAShWANTH  REDDY>
```