## **Explanation--dice rolling simulator**

```
import random
def roll_dice():
   dice_drawing = {
     1: (
        "| |",
"| 0 |",
     ),
        "|o |",
        "| o|",
"----",
     ),
     3: (
        "|o |",
         "| o |",
        " o ",
"----",
     4: (
        "|o o|",
        " | ",
        "|o o|",
"----",
     ),
        "|o o|",
        "| o | ",
         "|o o|",
     ),
```

```
6: (
    ""----",
    "|o o|",
    "|o o|",
    "|o o|",
    "|o o|",
    "----",
    ),

}

roll = input("Roll the dice? (Yes/No): ")
while roll.lower() == "Yes". lower():
    dice1 = random.randint(1, 6)
    dice2 = random.randint(1, 6)

print("dice rolled: {} and {} ". format(dice1, dice2))
print("\n".join(dice_drawing[dice1]))
print("\n".join(dice_drawing[dice2]))

roll = input("Roll again? (Yes/no): ")
roll_dice()
```

- 1. Import the random module:
  - The code starts by importing the random module, which is used to generate random numbers.
- 2. Define the roll dice function:
  - This function encapsulates the logic for rolling two dice and displaying the results.
- 3. Define a dictionary dice drawing:
  - This dictionary contains representations of the six faces of a six-sided die using ASCII art. Each face is represented as a tuple of strings, where each string represents a row of the die's face.
- 4. Prompt the user to roll the dice:
  - The program asks the user if they want to roll the dice and stores their response in the roll variable.
- 5. Start a while loop:
  - The program enters a while loop that continues as long as the user's response is "Yes" (case-insensitive).

## 6. Generate random numbers for two dice:

• Inside the loop, the program uses random.randint(1, 6) to generate random integers between 1 and 6 for two dice, simulating the roll of each die.

## 7. Display the results:

- The program prints the results of the dice rolls, indicating the numbers rolled.
- It then uses a combination of print and join to display the ASCII art representations of the dice faces based on the values rolled.
- 8. Ask the user if they want to roll again:
  - After displaying the results, the program prompts the user if they want to roll the dice again and stores their response in the roll variable.
- 9. End the loop:
  - If the user's response is not "Yes" (case-insensitive), the loop ends, and the program concludes.
- 10. Call the roll dice function:
  - Finally, the code calls the roll dice function to start the dice rolling simulation.

When you run this program, it will repeatedly ask if you want to roll the dice. If you respond "Yes," it will simulate rolling two dice, display the results, and then ask if you want to roll again. The loop continues until you respond with something other than "Yes," at which point the program ends. The ASCII art representations of the dice faces make the output visually appealing.