**Lesson 4 Assignment**

**Source Code:**

from random import randrange # Importing the randrange function from the random library

def main():

# Variable to control whether to continue playing

continue\_playing = "yes"

while continue\_playing.lower() == "yes":

user\_choice = get\_user\_weapon() # Get user weapon choice

opponent\_choice = get\_opponent\_weapon() # Get opponent's weapon choice

# Output the choices

print("You chose:", "Rock" if user\_choice == 1 else "Paper" if user\_choice == 2 else "Scissors")

print("Opponent chose:", "Rock" if opponent\_choice == 1 else "Paper" if opponent\_choice == 2 else "Scissors")

# Determine the winner

determine\_winner(user\_choice, opponent\_choice)

# Ask the user if they want to play again

continue\_playing = input("Do you want to play again? (yes/no): ")

# Print the completion statement

print("Completed by, Yashoda Dhital") # Your name here

def get\_user\_weapon():

print("\nChoose your weapon:")

print("1. Rock")

print("2. Paper")

print("3. Scissors")

while True:

try:

user\_choice = int(input("Enter the number of your choice (1-3): "))

if user\_choice in [1, 2, 3]: # Validate the input

return user\_choice # Return the user's choice

else:

print("Invalid choice! Please enter 1, 2, or 3.")

except ValueError:

print("Invalid input! Please enter a number.")

def get\_opponent\_weapon():

opponent\_choice = randrange(1, 4) # Generate a random number between 1 and 3

return opponent\_choice # Return the opponent's choice

def determine\_winner(user\_choice, opponent\_choice):

if user\_choice == opponent\_choice:

print("It's a tie!")

elif (user\_choice == 1 and opponent\_choice == 3): # Rock vs Scissors

print("You win! Rock crushes Scissors.")

elif (user\_choice == 2 and opponent\_choice == 1): # Paper vs Rock

print("You win! Paper covers Rock.")

elif (user\_choice == 3 and opponent\_choice == 2): # Scissors vs Paper

print("You win! Scissors cuts Paper.")

else:

print("You lose!") # If none of the above, the opponent wins

# Entry point of the program

if \_\_name\_\_ == "\_\_main\_\_":

main()

**Output:**

