1. **Rock-Paper-Scissors Game**

**User Input: Prompt the user to choose rock, paper, or scissors.**

**Computer Selection: Generate a random choice (rock, paper, or scissors) for**

**the computer.**

import random

def play\_game():

choices = ['rock', 'paper', 'scissors']

user\_choice = input("Enter your choice (rock, paper, or scissors): ").lower()

while user\_choice not in choices:

print("Invalid choice. Please enter rock, paper, or scissors.")

user\_choice = input("Enter your choice (rock, paper, or scissors): ").lower()

computer\_choice = random.choice(choices)

print(f"You chose {user\_choice}.")

print(f"Computer chose {computer\_choice}.")

if user\_choice == computer\_choice:

print("It's a tie!")

elif (

(user\_choice == 'rock' and computer\_choice == 'scissors') or

(user\_choice == 'paper' and computer\_choice == 'rock') or

(user\_choice == 'scissors' and computer\_choice == 'paper')

):

print("You win!")

else:

print("Computer wins!")

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

play\_game()