Task3

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

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

the computer.

Game Logic: Determine the winner based on the user's choice and the

computer's choice.

Rock beats scissors, scissors beat paper, and paper beats rock.

Display Result: Show the user's choice and the computer's choice.

Display the result, whether the user wins, loses, or it's a tie.

Score Tracking (Optional): Keep track of the user's and computer's scores for

multiple rounds.

Play Again: Ask the user if they want to play another round.

User Interface: Design a user-friendly interface with clear instructions and feedback.

Code:-

import random

def get\_computer\_choice():

return random.choice(['rock', 'paper', 'scissors'])

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

if user\_choice == computer\_choice:

return "It's a tie!"

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

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

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

return "You win!"

else:

return "You lose!"

def display\_choices(user\_choice, computer\_choice):

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

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

def play\_game():

user\_score = 0

computer\_score = 0

while True:

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

while user\_choice not in ['rock', 'paper', 'scissors']:

print("Invalid choice. Please choose again.")

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

computer\_choice = get\_computer\_choice()

display\_choices(user\_choice, computer\_choice)

result = determine\_winner(user\_choice, computer\_choice)

print(result)

if "win" in result:

user\_score += 1

elif "lose" in result:

computer\_score += 1

print(f"Score: You {user\_score} - {computer\_score} Computer")

play\_again = input("Do you want to play again? (yes/no): ").lower()

if play\_again != 'yes':

print("Thanks for playing!")

break

# Start the game

play\_game()

Output:-

