TASK 4

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 "tie"

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

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

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

return "user"

return "computer"

def display\_result(user\_choice, computer\_choice, winner):

print(f"\nYou chose: {user\_choice.capitalize()}")

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

if winner == "tie":

print("It's a tie!")

elif winner == "user":

print("You win!")

else:

print("Computer wins!")

def get\_user\_choice():

while True:

choice = input("Enter your choice (rock, paper, scissors): ").lower()

if choice in ['rock', 'paper', 'scissors']:

return choice

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

def play\_round():

user\_choice = get\_user\_choice()

computer\_choice = get\_computer\_choice()

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

display\_result(user\_choice, computer\_choice, winner)

return winner

def main():

user\_score = 0

computer\_score = 0

print("Welcome to Rock-Paper-Scissors!")

while True:

winner = play\_round()

if winner == "user":

user\_score += 1

elif winner == "computer":

computer\_score += 1

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

play\_again = input("Do you want to play again? (y/n): ").strip().lower()

if play\_again != 'y':

break

print(f"Thank you!Final score -> You: {user\_score} | Computer: {computer\_score}")

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

main()