

Codsoft Internship

Python Programming

Task 3 - To Create a Rock Paper Scissors Game

Python Code:

```
import random

def get_user_choice():
    choices = ["rock", "paper", "scissors"]
    while True:
        user_choice = input("Enter your choice (rock, paper, or scissors): ").lower()
        if user_choice in choices:
            return user_choice
        else:
            print("Invalid choice. Please choose 'rock', 'paper', or 'scissors'.")

def get_computer_choice():
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def determine_winner(user_choice, computer_choice):
    if user_choice == computer_choice:
        return "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 "user"
    else:
        return "computer"

def display_result(user_choice, computer_choice, winner):
    print(f"\nYou chose: {user_choice}")
    print(f"Computer chose: {computer_choice}")
    if winner == "tie":
        print("It's a tie!")
    elif winner == "user":
        print("You win!")
    else:
        print("You lose!")

def play_game():
    user_score = 0
    computer_score = 0
    while True:
        user_choice = get_user_choice()
        computer_choice = get_computer_choice()
        winner = determine_winner(user_choice, computer_choice)
```

```
display_result(user_choice, computer_choice, winner)

if winner == "user":
    user_score += 1
elif winner == "computer":
    computer_score += 1

print(f"\nScores -> You: {user_score} | Computer: {computer_score}\n")

play_again = input("Do you want to play again? (yes or no): ").lower()
if play_again != "yes":
    break

print("\nThanks for playing! Final scores:")
print(f"You: {user_score}")
print(f"Computer: {computer_score}")

if __name__ == "__main__":
    print("Welcome to Rock-Paper-Scissors!")
    play_game()
```

Output:

Output

Clear

```
Welcome to Rock-Paper-Scissors!
Enter your choice (rock, paper, or scissors): paper

You chose: paper
Computer chose: rock
You win!

Scores -> You: 1 | Computer: 0

Do you want to play again? (yes or no): yes
Enter your choice (rock, paper, or scissors): scissors

You chose: scissors
Computer chose: rock
You lose!

Scores -> You: 1 | Computer: 1

Do you want to play again? (yes or no):

Thanks for playing! Final scores:
You: 1
Computer: 1

=== Code Execution Successful ===
```