PROGRAM FOR ROCK,PAPER AND SCISSORS GAME

```
import random
count_rock = 0
count_paper = 0
count_scissors = 0
def update_counts(user_input):
  global count_rock, count_paper, count_scissors
  if user_input == 0:
    count_rock += 1
  elif user_input == 1:
    count_paper += 1
  else:
    count_scissors += 1
def predict():
  if count_rock > count_paper and count_rock > count_scissors:
    pred = 0
  elif count_paper > count_rock and count_paper > count_scissors:
    pred = 1
  elif count_scissors > count_rock and count_scissors > count_paper:
    pred = 2
  else:
     pred = random.randint(0, 2)
```

```
  return pred
```

```
player_score=0
comp_score=0
def update_scores(user_input):
  global player_score, comp_score
  pred = predict()
```

Program for rock ,paper n sisscors game

```
import random
count_rock = 0
count_paper = 0
count_scissors = 0
def update_counts(user_input):
  global count_rock, count_paper, count_scissors
  if user_input == 0:
    count_rock += 1
  elif user_input == 1:
    count_paper += 1
  else:
    count_scissors += 1
def predict():
  if count_rock > count_paper and count_rock > count_scissors:
    pred = 0
  elif count_paper > count_rock and count_paper > count_scissors:
    pred = 1
  elif count_scissors > count_rock and count_scissors > count_paper:
    pred = 2
  else:
     pred = random.randint(0, 2)
```

```
  return pred
```

```
player_score=0
comp_score=0
def update_scores(user_input):
  global player_score, comp_score
  pred = predict()
```

```
  elif user_input == 1:
    if pred == 1:
      print("\nYou played PAPER, computer played PAPER.")
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)
    elif pred == 0:
      print("\nYou played PAPER, computer played ROCK.")
      player_score += 1
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)
    else:
      print("\nYou played PAPER, computer played SCISSORS.")
      comp_score += 1
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)

  elif user_input == 1:
    if pred == 1:
      print("\nYou played PAPER, computer played PAPER.")
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)
    elif pred == 0:
      print("\nYou played PAPER, computer played ROCK.")
      player_score += 1
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)
    else:
      print("\nYou played PAPER, computer played SCISSORS.")
      comp_score += 1
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)

  else:
```

```
    if pred == 2:
      print("\nYou played SCISSORS, computer played SCISSORS.")
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)
    elif pred == 1:
      print("\nYou played SCISSORS, computer played PAPER.")
      player_score += 1
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)
    else:
      print("\nYou played SCISSORS, computer played ROCK.")
      comp_score += 1
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)
```

```
def update_scores(user_input):
  global player_score, comp_score
```

```
  pred = predict()
  if user_input == 0:
    if pred == 0:
      print("\nYou played ROCK, computer played ROCK.")
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)
    elif pred == 1:
      print("\nYou played ROCK, computer played PAPER.")
      comp_score += 1
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)
    else:
      print("\nYou played ROCK, computer played SCISSORS.")
      player_score += 1
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)
```

```
  elif user_input == 1:
    if pred == 1:
      print("\nYou played PAPER, computer played PAPER.")
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)
    elif pred == 0:
      print("\nYou played PAPER, computer played ROCK.")
      player_score += 1
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)
    else:
      print("\nYou played PAPER, computer played SCISSORS.")
      comp_score += 1
```

```
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)

  elif user_input == 1:
    if pred == 1:
      print("\nYou played PAPER, computer played PAPER.")
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)
    elif pred == 0:
      print("\nYou played PAPER, computer played ROCK.")
      player_score += 1
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)
    else:
      print("\nYou played PAPER, computer played SCISSORS.")
      comp_score += 1
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)

  else:
    if pred == 2:
      print("\nYou played SCISSORS, computer played SCISSORS.")
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)
    elif pred == 1:
      print("\nYou played SCISSORS, computer played PAPER.")
      player_score += 1
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)
    else:
      print("\nYou played SCISSORS, computer played ROCK.")
      comp_score += 1
      print("\nComputer Score: ", comp_score, "\nYour Score: ",
player_score)
```

```
valid_entries = ['0', '1', '2']
while True:
user_input = input("Enter 0 for ROCK, 1 for PAPER and 2 for SCISSORS: ")
while user_input not in valid_entries:
  print("\nInvalid Input!")
    user_input = input("Enter 0 for ROCK, 1 for PAPER and 2 for
SCISSORS: ")
```

```
user_input = int(user_input)
update_counts (user_input)
```

```
    if comp_score == 10:
    print("Computer Won!")
```

```
    break
  elif player_score == 10:
    print("You won!")
    break;
```