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1  #Conditionals Challenge 20:  Rock, Paper, Scissors App
2  import random
3
4  print("Welcome to a game of Rock, Paper, Scissors")
5
6  #Get user input
7  rounds = int(input("\nHow many rounds would you like to play: "))
8
9  #Initialize variables
10 moves = ['rock', 'paper', 'scissors']
11 p_score = 0
12 c_score = 0
13
14 #The main game loop
15 for game_round in range(rounds):
16     #Print the main game screen and get user input
17     print("\nRound " + str(game_round + 1))
18     print("Player: " + str(p_score) + "\tComputer: " + str(c_score))
19
20     #Get the computers move
21     c_index = random.randint(0,2)
22     c_choice = moves[c_index]
23
24     #Get the players move
25     p_choice = input("Time to pick...rock, paper, scissors: ").lower().strip()
26
27     #If the player makes a valid move
28     if p_choice in moves:
29         print("\tComputer: " + c_choice)
30         print("\tPlayer: " + p_choice)
31         #Computer chooses rock
32         if p_choice == 'rock' and c_choice == 'rock':
33             winner = 'tie'
34             phrase = 'It is a tie, how boring!'
35         elif p_choice == 'paper' and c_choice == 'rock':
36             winner = 'player'
37             phrase = 'Paper covers rock!'
38         elif p_choice == 'scissors' and c_choice == 'rock':
39             winner = 'computer'
40             phrase = 'Rock smashes scissors!'
41         #Computer chooses paper
42         elif p_choice == 'rock' and c_choice == 'paper':
43             winner = 'computer'
44             phrase = 'Paper covers rock!'
45         elif p_choice == 'paper' and c_choice == 'paper':
46             winner = 'tie'
47             phrase = 'It is a tie, how boring!'
48         elif p_choice == 'scissors' and c_choice == 'paper':
49             winner = 'player'
50             phrase = 'Scissors cut paper!'
51         #Computer chooses scissors
52         elif p_choice == 'rock' and c_choice == 'scissors':
53             winner = 'player'
54             phrase = 'Rock smashes scissors!'
55         elif p_choice == 'paper' and c_choice == 'scissors':
56             winner = 'computer'
57             phrase = 'Scissors cut paper!'
58         elif p_choice == 'scissors' and c_choice == 'scissors':
59             winner = 'tie'
60             phrase = 'It is a tie, how boring!'
61         #Catch for any other conditions
62         else:
63             print("Round winner not calculated.")
64             winner = 'tie'

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65         phrase = 'It is a tie, how boring!'
66
67     #Display round results
68     print("\t" + phrase)
69     if winner == 'player':
70         print("\tYou win round " + str(game_round + 1) + ".")
71         p_score += 1
72     elif winner == 'computer':
73         print("\tComputer wins round " + str(game_round + 1) + ".")
74         c_score += 1
75     else:
76         print("\tThis round was a tie.")
77
78     #Else the player did not make a valid move
79     else:
80         print("That is not a valid game option!")
81         print("Computer gets the point!")
82         c_score += 1
83
84     #Game has ended, print results
85     print("\nFinal Game Results")
86     print("\tRounds Played: " + str(rounds))
87     print("\tPlayer Score: " + str(p_score))
88     print("\tComputer Score: " + str(c_score))
89     if p_score > c_score:
90         print("\tWinner:  PLAYER!!!")
91     elif c_score > p_score:
92         print("\tWinner:  Computer :-(")
93     else:
94         print("\tThe game was a tie.")

```