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1  import random
2  import tkinter as tk
3
4  # Initialize the Tkinter window
5  root = tk.Tk()
6  root.title("Rock-Paper-Scissors Game")
7  root.state("zoomed") # Maximizing the window
8  root.config(bg= "gray70")
9
10 # Instructions text
11 instructions = """"Welcome to the classic Rock-Paper-Scissors game!
12
13 Rules:
14 -Rock beats Scissors.
15 -Scissors beat Paper.
16 -Paper beats Rock.
17 How to Play:
18
19 Enter rock, paper, or scissors when prompted.
20 The computer will pick randomly.
21 Results and scores are shown after each round.
22 Try to outsmart the computer and score the most points. Good luck!""""
23
24 # Label for instructions
25 label1 = tk.Label(root, text=instructions, font=("Arial", 12, "bold"), bg="gray80", justify="center",borderwidth= 1, relief= "solid")
26 label1.pack(pady=20)
27
28 # Score variables
29 user_score = 0
30 computer_score = 0
31
32 # Display the scores
33 score_label = tk.Label(root, text=f"Your Score: {user_score}\n Computer Score: {computer_score}",
34                        font=("Arial", 15) , bg="gray60", borderwidth= 2, relief= "solid")
35 score_label.pack(pady=10)
36
37 # Result label

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38 result_label = tk.Label(root, text="", font=("Arial", 14, "bold"), bg="gray70")
39 result_label.pack(pady=10)
40
41 # Function to update the result and scores
42 def game_rps(user_choice):
43     global user_score, computer_score
44
45     all_choices = ['rock', 'paper', 'scissors']
46     computer_choice = random.choice(all_choices)
47
48     if user_choice == computer_choice:
49         result = "It's a tie!"
50
51     elif user_choice == "rock" and computer_choice == "scissors" or \
52          user_choice == "paper" and computer_choice == "rock" or \
53          user_choice == "scissors" and computer_choice == "paper":
54         result = "You win!"
55         user_score += 1
56     else:
57         result = "You lose!"
58         computer_score += 1
59
60     # Update the result and score labels
61     result_label.config(text= f"You choose: {user_choice.capitalize()}\n Computer choose: {computer_choice.capitalize()}\n {result}",
62                        justify= "center", borderwidth= 2, relief= "solid")
63     score_label.config(text= f"Your Score: {user_score} \n Computer Score: {computer_score}")
64
65 # Button functions for rock, paper, scissors
66 def choose_rock():
67     game_rps("rock")
68
69 def choose_paper():
70     game_rps("paper")
71
72 def choose_scissors():
73     game_rps("scissors")
74

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75 # Buttons for user choice
76 rock_button = tk.Button(root, text= "Rock", font= ( "Arial", 14, "bold"), command= choose_rock)
77 rock_button.place(x=450, y=450)
78
79 paper_button = tk.Button(root, text= "Paper", font= ( "Arial", 14, "bold"), command= choose_paper)
80 paper_button.place(x=600, y=450)
81
82 scissors_button = tk.Button(root, text= "Scissors", font= ( "Arial", 14, "bold"), command= choose_scissors)
83 scissors_button.place(x=750, y=450)
84
85 # Play Again Button
86 def play_game():
87
88     global user_score, computer_score
89     user_score = 0
90     computer_score = 0
91     score_label.config(text= f"Your Score: {user_score}\nComputer Score: {computer_score}")
92     result_label.config(text= "")
93
94 # Play Again Button
95 play_again_button = tk.Button(root, text= "Play Again", font= ( "Arial", 15, "bold"), command= play_game, bg= "dim gray")
96 play_again_button.place(x= 580, y=530)
97
98 # Run the Tkinter event loop
99 tk.mainloop()
```

# OUTPUT:

Rock-Paper-Scissors Game

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Welcome to the classic Rock-Paper-Scissors game!

Rules:

- Rock beats Scissors.
- Scissors beat Paper.
- Paper beats Rock.

How to Play:

Enter rock, paper, or scissors when prompted.

The computer will pick randomly.

Results and scores are shown after each round.

Try to outsmart the computer and score the most points. Good luck!

Your Score: 0

Computer Score: 0

Rock

Paper

Scissors

Play Again