

Documentation for Rock-Paper-Scissors

Game Code

Overview

This Python program allows the user to play the classic Rock-Paper-Scissors game. The game can be played either against the computer or against a friend. The game includes clear instructions, and the results are based on the standard rules of Rock-Paper Scissors.

Modules Used

- **random**: Used to generate random choices for the computer in the game.

Functions

1. against_computer()

This function allows the user to play Rock-Paper Scissors against the computer.

- player: The player's name is entered at the start of the game.
- selection(): This inner function randomly selects either "Rock", "Paper", or "Scissor" as the computer's choice.
- rule(player_choice, computer_choice): This inner function determines the winner based on the player's choice and the computer's choice:
 - Rock beats Scissors.
 - Scissors beat Paper.
 - Paper beats Rock.
 - If both the player and the computer choose the same option, it is a draw.
 - An error message is shown if the player enters an invalid choice (anything other than 1, 2, or 3).

Gameplay Loop:

The function runs in a loop where the player can choose and see the results. The game continues until the player decides to exit.

2. **against_friend()**

This function allows two players to play Rock-Paper Scissors against each other.

- player1: Name of the first player.
- player2: Name of the second player.
- rule(c1, c2): This inner function determines the winner based on the choices of the two players using the same rules as above. If the choices are invalid, an error message is displayed.

Gameplay Loop:

The game runs in a loop where both players make their choices and see the results. The game continues until the players decide to exit.

3. **Main Section**

- The user is prompted to choose between playing against the computer or a friend.
- The appropriate function (against_computer() or against_friend()) is called based on the user's input.
- An error message is displayed if the user inputs an invalid option.

Input

- Choice to Play:
 - 9: Play against the computer.
 - 5: Play against a friend.
- In-Game Choices:
 - 1: Rock.
 - 2: Scissor.
 - 3: Paper.
- Continue Game: The player can press `/' to continue playing or any other key to exit.

Output

- The game announces the winner of each round or indicates if it is a draw.
- The game ends with a "Game Over" message when the player(s) choose to exit.

Example Usage

1. Run the program.
2. Choose whether to play against the computer (press 9) or a friend (press 5).
3. Enter your choice in each round (Rock, Scissor, or Paper).
4. See the result of each round.
5. Continue playing or exit the game as desired.

Notes

- The program only accepts integer inputs (1, 2, or 3) for in-game choices and validates the input accordingly.
- The game is case-sensitive when checking for continuation (`/` to continue).

This documentation serves as a guide to understanding the structure and functionality of the Rock-Paper-Scissors game code.