

Programming Exam 3

Date/Time: 2023.03.28 08:10 – 09:00

(程式檔命名學號_quiz3.py，上傳至 Moodle PE3 上傳區)

Problem: Simple Rock-Paper-Scissors Game

Create a simple Rock-Paper-Scissors game in Python that allows two players to compete against each other. The game should follow these rules and features:

- (1) Print a welcome message to the players when the game starts.
- (2) Prompt the players to enter their names and store them.
- (3) Initialize the scores of both players to 0.
- (4) Use a loop to keep the game running until the players decide to stop.
- (5) During each round of the loop, ask both players for their choices (**rock**, **paper**, or **scissors**).
- (6) Determine the winner of the round based on the standard Rock-Paper-Scissors rules, and update the scores accordingly:
 - If both players choose the same option, it's a tie, and no one increment the score.
 - If Player 1 wins, show Player 1's winning message, and increment Player 1's score.
 - If Player 2 wins, show Player 2's winning message, and increment Player 2's score.
- (7) After each round, ask the players if they want to continue the game.
- (8) If the players choose to stop, break the loop and end the game.
- (9) Once the game is over, display the final scores for both players, and show the final winner.

Sample Input/Output

(以下是你程式執行後須印出的結果)

<pre>c:\workspace>python pe3.py Welcome to the simple Rock-Paper-Scissors Game! Enter Player 1's name: A Enter Player 2's name: B A, enter your choice (rock, paper, or scissors): rock B, enter your choice (rock, paper, or scissors): rock It's a tie! Do you want to continue the game? (yes or no): yes A, enter your choice (rock, paper, or scissors): rock B, enter your choice (rock, paper, or scissors): scissors A wins this round! Do you want to continue the game? (yes or no): yes A, enter your choice (rock, paper, or scissors): paper B, enter your choice (rock, paper, or scissors): rock A wins this round! Do you want to continue the game? (yes or no): yes A, enter your choice (rock, paper, or scissors): scissors B, enter your choice (rock, paper, or scissors): rock B wins this round! Do you want to continue the game? (yes or no): no A's score: 2 B's score: 1 A is the final winner!</pre>	<pre>c:\workspace>python pe3.py Welcome to the simple Rock-Paper-Scissors Game! Enter Player 1's name: Tom Enter Player 2's name: Mary Tom, enter your choice (rock, paper, or scissors): paper Mary, enter your choice (rock, paper, or scissors): paper It's a tie! Do you want to continue the game? (yes or no): yes Tom, enter your choice (rock, paper, or scissors): scissors Mary, enter your choice (rock, paper, or scissors): scissors It's a tie! Do you want to continue the game? (yes or no): no Tom's score: 0 Mary's score: 0 It's a tie!</pre>
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(繳交是交 pe3.py 檔，不是交截圖)

Note: You need to write comments (註解) for each part in your code.