

# Rock Paper Scissors Game (Best of 3)

## Overview

This is a simple, console-based **Rock Paper Scissors** game implemented in Python. The game follows a **best-of-3** format: the first player (human) or computer to win 2 rounds wins the match.

The entire project is contained in a single Jupyter Notebook file (Rock\_Paper\_Scissors\_game Project.ipynb), making it easy to run, experiment with, and share in environments like Jupyter Lab, Google Colab, or VS Code.

It's an excellent beginner-friendly project that demonstrates core Python concepts such as:

- Loops (while)
- Conditionals (if, elif, else)
- Random selection (random.choice)
- User input handling
- Score tracking with variables
- Game logic implementation

Perfect for learning, teaching, or as a portfolio piece showcasing fundamental programming skills.

## Features

- **Best-of-3 Match:** Play until one side wins 2 rounds.
- **Interactive Console Play:** Player enters "rock", "paper", or "scissors" each round.
- **Computer Random Choice:** Fair AI opponent using random.choice.
- **Clear Feedback:**
  - Shows computer's choice after each round.
  - Announces round winner (player, computer, or tie).
  - Displays current score after every round.
- **Final Result Announcement:** Declares the overall winner at the end.

## How to Play

1. Run the notebook cell.
2. When prompted, type one of: rock, paper, or scissors (case-insensitive).
3. The computer makes its choice.
4. The winner of the round is announced, score is updated.
5. Game continues until one reaches 2 wins.

Example output:

```
text
Let's play rock, paper, or scissors
Choose rock, paper, or scissors: rock
Computer chose: scissors
player's choice beats the computer choice
You won
Current Score - Player: 1, Computer: 0
Congratulations! You won.
```

```
Let's play rock, paper, or scissors
Choose rock, paper, or scissors: paper
Computer chose: paper
player's choice equals the computer's choice
It's a tie
Current Score - Player: 1, Computer: 0
Congratulations! You won.
```

```
...
```

## Requirements

- Python 3.6+
- Only uses built-in modules:
  - random
  - No external dependencies

## Installation & Running

1. Clone the repository:

Bash

```
git clone https://github.com/yourusername/rock-paper-scissors-game.git
cd rock-paper-scissors-game
```

2. Open and run the notebook:

Bash

```
jupyter notebook "Rock_Paper_Scissors_game Project.ipynb"
```

Or open it directly in Google Colab, VS Code, or any Jupyter environment.

3. Execute the single code cell to start playing!

## Project Structure

- **Rock\_Paper\_Scissors Project.ipynb**: The complete game in one executable Jupyter Notebook cell.
  - All logic is self-contained.
  - Easy to read, modify, and extend.

## License

MIT License – feel free to use, modify, and share!

## Contributing

Contributions, issues, and feature requests are welcome! Feel free to fork and submit pull requests.