## **ROCK, PAPER, SCISSORS**

A simple text-based "Rock, Paper, Scissors" game. In this game, the player competes against the computer. The player will choose either rock, paper, or scissors, and the computer will randomly choose one as well. The winner will be determined based on the classic rules of the game.

## **How to Run the Game**

- Make sure you have Python installed on your computer.
- Copy the code above into a text editor and save it as rock\_paper\_scissors.py.
- Open your terminal or command prompt.
- Navigate to the directory where you saved the file.

Run the game by typing python rock\_paper\_scissors.py and hitting Enter.

## **How to Play**

- The game will prompt you to enter your choice: "rock", "paper", or "scissors".
- The computer will randomly choose one of the three options.
- The game will announce the winner based on the rules:

Rock beats scissors.

Scissors beat paper.

Paper beats rock.

You can continue playing until you type "quit" to exit the game.

## PROGRAM:

Import random

Def get\_computer\_choice():

Choices = ['rock', 'paper', 'scissors']

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Return random.choice(choices)
Def get_user_choice():
  User_input = input("Enter rock, paper, or scissors (or 'quit' to stop playing): ").lower()
 While user input not in ['rock', 'paper', 'scissors', 'quit']:
    Print("Invalid choice. Please try again.")
    User_input = input("Enter rock, paper, or scissors (or 'quit' to stop playing): ").lower()
  Return user input
Def determine_winner(user_choice, computer_choice):
  If user_choice == computer_choice:
    Return "It's a tie!"
  Elif (user_choice == 'rock' and computer_choice == 'scissors') or \
    (user_choice == 'paper' and computer_choice == 'rock') or \
    (user_choice == 'scissors' and computer_choice == 'paper'):
    Return "You win!"
  Else:
    Return "You lose!"
Def play game():
  Print("Welcome to Rock, Paper, Scissors!")
 While True:
    User_choice = get_user_choice()
   If user_choice == 'quit':
     Print("Thanks for playing!")
     Break
    Computer_choice = get_computer_choice()
    Print(f"You chose: {user_choice}")
    Print(f"The computer chose: {computer_choice}")
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```
Result = determine_winner(user_choice, computer_choice)

Print(result)

If __name__ == "__main__":

Play game()
```

# **OUTPUT:**

Welcome to Rock, Paper, Scissors!

Enter rock, paper, or scissors (or 'quit' to stop playing): rock

You chose: rock

The computer chose: scissors

You win!

Enter rock, paper, or scissors (or 'quit' to stop playing): paper

You chose: paper

The computer chose: rock

You win!

Enter rock, paper, or scissors (or 'quit' to stop playing): scissors

You chose: scissors

The computer chose: paper

You win!

Enter rock, paper, or scissors (or 'quit' to stop playing): rock

You chose: rock

The computer chose: paper

You lose!

Enter rock, paper, or scissors (or 'quit' to stop playing): quit

Thanks for playing!

```
Output : Welcome to Rock, Paper,
    Scissors!
Enter rock, paper, or scissors (or 'quit'
    to stop playing): rock
You chose: rock
The computer chose: scissors
You win!
Enter rock, paper, or scissors (or 'quit'
    to stop playing): paper
You chose: paper
The computer chose: rock
You win!
Enter rock, paper, or scissors (or 'quit'
    to stop playing): scissors
You chose: scissors
The computer chose: paper
You win!
Enter rock, paper, or scissors (or 'quit'
    to stop playing): rock
You chose: rock
The computer chose: paper
You lose!
```