



Python Rock, Paper, Scissors

Pre-work	3 options: 1) Use https://trinket.io - If you don't have a free account, sign up for one. 2) Use https://replit.com - If you don't have an account, you can sign up for a Starter Account 3) Install Python from https://python.org and use the IDLE Editor	
Getting Started	Create a new Trinket (choose Python), Replit (choose Python), or a New File in IDLE (save it as Guessword.py)	
Code Start	import random	♦ random is a library that lets the computer make choices for us
Step 1: Create Variables	weapons = ['rock', 'paper', 'scissors'] computer_choice = random.choice(weapons)	♦ We need: - List of options - The computer's choice
Step 2: Intro Game	print("Let's play Rock, Paper, Scissors") print("I've chosen my weapon.") print("Choose yours!")	♦ Invite the player to join us ♦ Make sure they know computer choice has been made
Step 3: User's choice	player_choice = '' while player_choice not in weapons: player_choice = input("Rock, Paper, or Scissors? ") player_choice = player_choice.lower()	♦ Input for user choice ♦ Make sure user chose one of the available weapons ♦ Change it to lower case for comparison with the computer's choice ♦ Reminder to indent
Step 4: Check for tie	if computer_choice == player_choice: print("Tie game. Great minds think alike!")	♦ Reminder to indent
Step 5: Check for results if computer chose Rock	elif computer_choice == 'rock': if player_choice == 'scissors': print("I won! Rock smashes scissors.") elif player_choice == 'paper': print("You won! Paper covers rock.")	♦ 2 levels of if (indent) ♦ Remember player choices



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Step 6: Check for results if computer chose Paper	<pre>elif computer_choice == 'paper': if player_choice == 'scissors': print("You won! Scissors cuts paper.") elif player_choice == 'rock': print("I won! Paper covers rock.")</pre>	
Step 7: Check for results if computer chose Scissors	<pre>elif computer_choice == 'scissors': if player_choice == 'rock': print("You won! Rock smashes scissors.") elif player_choice == 'paper': print("I won! Scissors cuts paper.")</pre>	

Other things to try:

- Add the ability to ask the player if they want a rematch
- Can you modify this for Rock, Paper, Scissors, Lizard, Spock
- What other combos work?
 - Cowboy, Ninja, Bear
 - Cockroach, Nuclear Bomb, Foot



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Entire Program:

```
import random

weapons = ['rock', 'paper', 'scissors']
computer_choice = random.choice(weapons)

print("Let's play Rock, Paper, Scissors")
print("I've chosen my weapon.")
print("Choose yours!")
player_choice = input("Rock, Paper, or Scissors? ")
player_choice = player_choice.lower()
while player_choice not in weapons:
    player_choice = input("Rock, Paper, or Scissors? ")
    player_choice = player_choice.lower()

if computer_choice == player_choice:
    print("Tie game. Great minds think alike!")
elif computer_choice == 'rock':
    if player_choice == 'scissors':
        print("I won! Rock smashes scissors.")
    elif player_choice == 'paper':
        print("You won! Paper covers rock.")
elif computer_choice == 'paper':
    if player_choice == 'scissors':
        print("You won! Scissors cuts paper.")
    elif player_choice == 'rock':
        print("I won! Paper covers rock.")
elif computer_choice == 'scissors':
    if player_choice == 'paper':
        print("I won! Scissors cuts paper.")
    elif player_choice == 'rock':
        print("You won! Rock smashes scissors.")
```