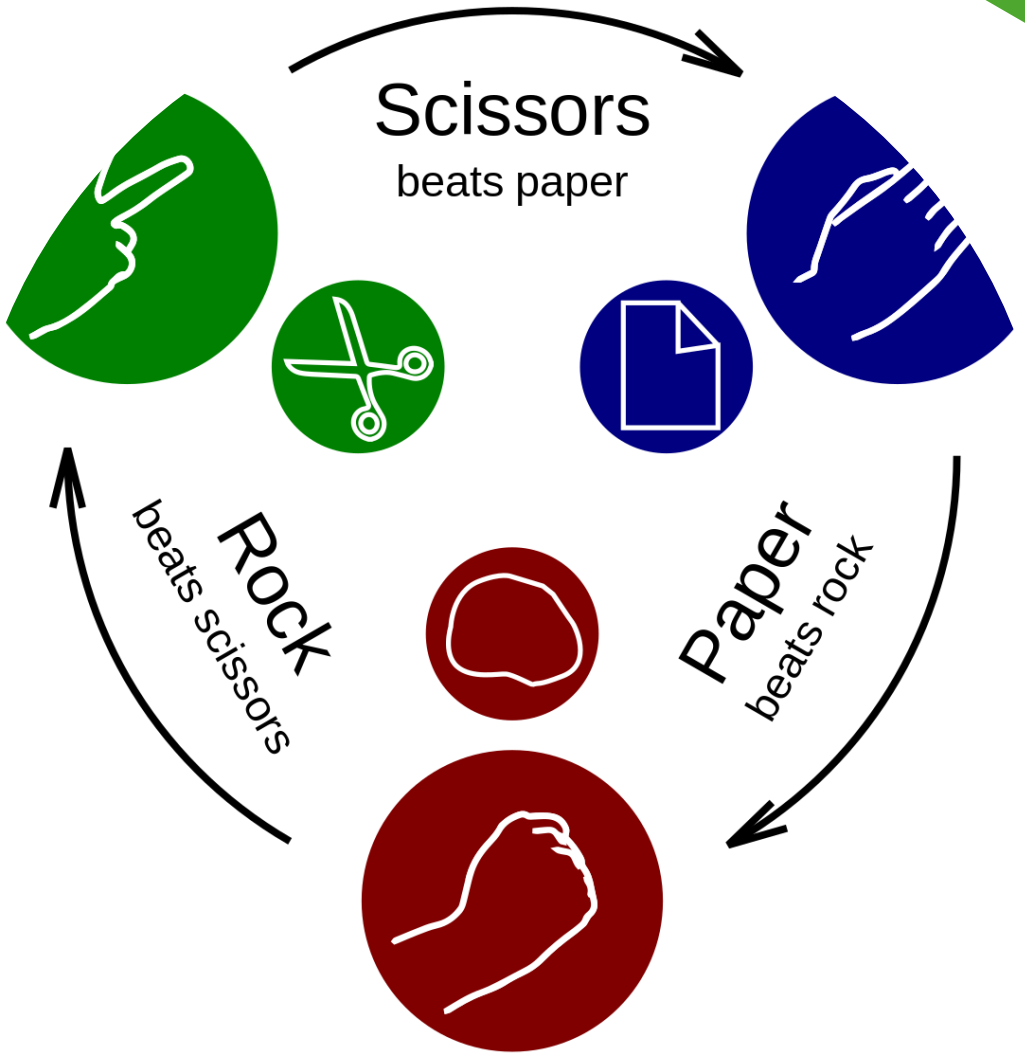

Rock, Paper, Scissors

Project Synopsis

Students will write a Python program that simulates the game of Rock, Paper, Scissors.

Project Requirements – Part 1 of 2

- Declare a variable to store the player's name. Assign it a value of “Test Player” to start.
  - Hint #01: What kind of variable do you need to store the name?

- Declare a variable to store the players score and the CPU player score. Assign a value of 0 to both variables.
  - Hint #01: What data type works best for these variables?

- Declare a variable to store the player choice and CPU choice of rock, paper, or scissors. Assign a value of None to both variables.
  - Hint #01: Can you store the choice as an integer?

- Allow player to input their name **and** refer to player by name in game.
  - Hint #02: How do you let the player type their name in the first place?

- Output a basic description of the rules on screen for the player.
  - Rock beats Scissors, Scissors beats Paper, and Paper beats Rock.
  - The winner scores a point. If each player picks the same no points are awarded.
  - The first player to five points wins.

Project Requirements – Part 2 of 2

- Create a loop that will run until one player has scored five points. In this loop the following actions should occur:
  - Print the current score for player and CPU.
  - Allow the player to select Rock, Paper, or Scissors.
  - Allow the CPU to randomly select between Rock, Paper, or Scissors.
  - Compare the player choice to the CPU choice.
  - Output the results to the screen.
  - If there was a winner, award one point to the winner.

- After one player has scored five points, output a message declaring the winner.

Sample Output Part One

```
Ok, it's time to play Rock, Paper Scissors!
Choose one and type rock, paper, or scissors.rock
You have selected rock.
Is that correct? Yes / No
yes
You have chosen rock.  The CPU chose rock.
This is a draw!

Player 1 Score: 0

CPU Score: 0

Ok, it's time to play Rock, Paper Scissors!
Choose one and type rock, paper, or scissors.paper
You have selected paper.
Is that correct? Yes / No
yes
You have chosen paper.  The CPU chose scissors.
Scissors beats paper, so you have lost!

Player 1 Score: 0

CPU Score: 1

Ok, it's time to play Rock, Paper Scissors!
Choose one and type rock, paper, or scissors.scissors
You have selected scissors.
Is that correct? Yes / No
yes
You have chosen scissors.  The CPU chose rock.
Rock beats scissors, so you have lost!

Player 1 Score: 0

CPU Score: 2

Ok, it's time to play Rock, Paper Scissors!
Choose one and type rock, paper, or scissors.
```

Sample Output Part Two

```
Ok, it's time to play Rock, Paper Scissors!
Choose one and type rock, paper, or scissors.paper
You have selected paper.
Is that correct? Yes / No
yes
You have chosen paper.  The CPU chose scissors.
Scissors beats paper, so you have lost!

Player 1 Score: 1

CPU Score: 4

Ok, it's time to play Rock, Paper Scissors!
Choose one and type rock, paper, or scissors.paper
You have selected paper.
Is that correct? Yes / No
yes
You have chosen paper.  The CPU chose scissors.
Scissors beats paper, so you have lost!

Player 1 Score: 1

CPU Score: 5

Unfortunately, you have lost to the CPU.
```

Bonus Challenges – Submit as a separate .cs file

- Create an unbeatable CPU for Rock, Paper, Scissors.
- Create a version of the game ‘Rock, Paper, Scissors, Lizard, Spock’.