

Mr. Giansante



C++ Programming
Rock Paper Scissors

August 2018

Rock Paper Scissors

Create a C++ program that simulates a Rock Paper Scissors game between the player and the computer.

The User Interface should look as follows:

```
[R] Rock
[P] Paper
[S] Scissors
[Q] Quit
```

Make your choice: _

After the user selects, use a Random number to select for the computer.

The user should then be told so ...

Example 1.

```
You chose Rock.
The computer chose Paper.
Paper beats Rock.
So you lost.
```

Example 2.

```
You chose Scissors.
The computer chose Paper.
Scissors beats Paper.
So you win.
```

Example 3.

```
You chose Scissors.
The computer chose Scissors.
It's a tie.
```

You will need to use many "If" statements.

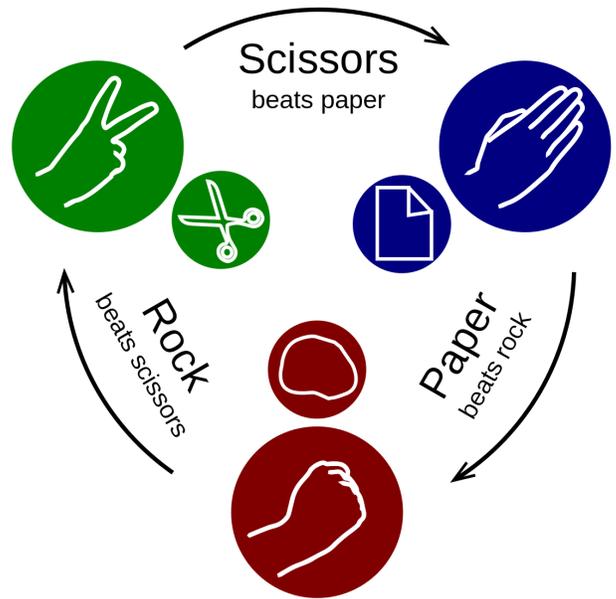
Keep track of how many times the player wins and how many times the computer wins, and display the totals after each turn.

Start Screen

You can use the website below to generate large ASCII text for your start screen:

<http://patorjk.com/software/taag/>

When using this website note that you will need to replace the "\" characters with "\\\".



Rock Paper Scissors



Learning Outcomes

Programming Concepts and Skills

- A1. demonstrate the ability to use different data types, including one-dimensional arrays, in computer programs
- A2. demonstrate the ability to use control structures and simple algorithms in computer programs
- A3. demonstrate the ability to use subprograms within computer programs
- A4. use proper code maintenance techniques and conventions when creating computer programs

Software Development

- B1. use a variety of problem-solving strategies to solve different types of problems independently and as part of a team
- B2. design software solutions to meet a variety of challenges
- B3. design algorithms according to specifications
- B4. apply a software development life-cycle model to a software development project

Please fill out all the information in this column using a pen before getting this assignment marked.

Name

_____ _____
Date Class

Academic Honesty

The work I am submitting is completely my own creation and has not been copied from anyone else's work. If I have received help on this project, the names of those who have assisted are listed below.

Signature

Pre-Marking

The following people have pre-marked this assignment:
(minimum of two)

User Interface

- Appropriate Title, Author Information, etc.
- Efficient and Esthetically-Pleasing User Interface
- Spelling and Grammar are correct

Code / Programming Style

- Variables are declared and logically named
- Code is commented where appropriate
- Code is indented and spaced to show structure
- Code is efficient

Work Ethic / Problem Solving Skills

- Problem Solving Skills are demonstrated
- Makes Productive Use of Time
- Only Seeks Help when Necessary

Program-Specific Criteria

- User is asked to select Rock, Paper, Scissor, Exit
- Computer's choice is displayed
- Result is displayed: You Lose, You Win, Tie
- Game repeats until Exit is selected
- Score is kept and displayed throughout

Teacher Comments

- Level 1 - Limited ability to meet standard and limited effectiveness
- Level 2 - Some ability demonstrated and moderately effective
- Level 3 - Considerable ability demonstrated, considerable clarity or accuracy
- Level 4 - Thorough, high degree of skill demonstrated, insightful, highly accurate

Level