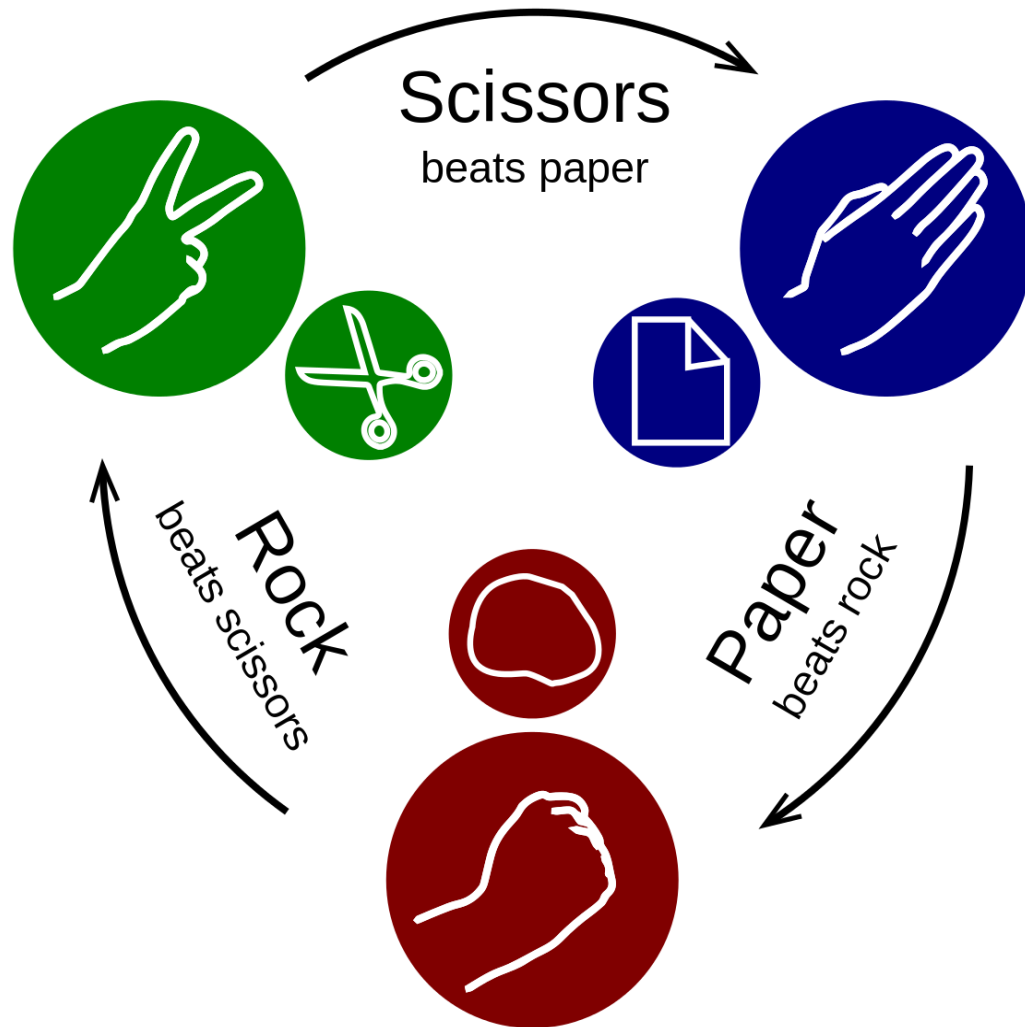


Take Home Program 6

Rock Paper Scissor Game

Rock-Paper-Scissors Game



Rules of games:

- Rock crushes Scissors
- Scissors cuts Paper.
- Paper covers Rocks.

Rock-Paper-Scissors Game Program

- **Version 1 – 10 points** - Input validation is not required.
 - No syntax, logic or runtime errors.
 - Your program should be readable, well comments and organized.

- **Version 2 – 15 points** - Input validation is required.
 - Validate user input for each of repeated loop.
 - Accept lower case, upper case.
 - Not accept numbers, punctuations or symbol characters.
 - No syntax, logic or runtime errors.
 - Your program should be readable, well comments and organized.

Sample run – version 1 Without Input Validation

```
***** Your name's Rock-Paper-Scissor Game *****  
(version 1 - no input validation)
```

```
My name is GameBot, what is your name? Birdy
```

```
Choose a hand to play:
```

```
Type R for rock, P for Paper, or S for Scissors.  
When you want to stop, type E for End instead.
```

```
Your choice: 4
```

```
You picked 4. I picked S.
```

```
Choose a hand to play:
```

```
Type R for rock, P for Paper, or S for Scissors.  
When you want to stop, type E for End instead.
```

```
Your choice: R
```

```
You picked R. I picked S.
```

```
Birdy, YOU WIN!!!!
```

```
Choose a hand to play:
```

```
Type R for rock, P for Paper, or S for Scissors.  
When you want to stop, type E for End instead.
```

```
Your choice: P
```

```
You picked P. I picked S.
```

```
I win! HAHAAAAHA!!!
```

```
Choose a hand to play:
```

```
Type R for rock, P for Paper, or S for Scissors.  
When you want to stop, type E for End instead.
```

```
Your choice: P
```

```
You picked P. I picked S.
```

```
I win! HAHAAAAHA!!!
```

```
Choose a hand to play:
```

```
Type R for rock, P for Paper, or S for Scissors.  
When you want to stop, type E for End instead.
```

```
Your choice: P
```

```
You picked P. I picked P.
```

```
We are tied. No winner. Try again.
```

```
Choose a hand to play:
```

```
Type R for rock, P for Paper, or S for Scissors.  
When you want to stop, type E for End instead.
```

```
Your choice: E
```

```
Thank you for playing, Birdy.
```

```
You won 1 hands.
```

```
I won 2 hands.
```

```
I win the game! I am clearly the better player. Nyah, nyah!
```

```
Press any key to continue . . .
```

Sample run – version 2

Input validation

```
***** Your name's Rock-Paper-Scissor Game *****  
(Version 2 - Input validation for each repeated loop.)
```

```
My name is GameBot, what is your name? Susie
```

```
Choose a hand to play:
```

```
Type R for rock, P for Paper, or S for Scissors.
```

```
When you want to stop, type E for End instead.
```

```
Your choice: @
```

```
Your input must be one of the characters (R, P, S or E).
```

```
Choose a hand to play:
```

```
Type R for rock, P for Paper, or S for Scissors.
```

```
When you want to stop, type E for End instead.
```

```
Your choice: r
```

```
You picked r. I picked S.
```

```
Susie, YOU WIN!!!!
```

```
Choose a hand to play:
```

```
Type R for rock, P for Paper, or S for Scissors.
```

```
When you want to stop, type E for End instead.
```

```
Your choice: p
```

```
You picked p. I picked S.
```

```
I win! HAHAAAAH!!
```

```
Choose a hand to play:
```

```
Type R for rock, P for Paper, or S for Scissors.
```

```
When you want to stop, type E for End instead.
```

```
Your choice: 4
```

```
Your input must be one the characters (R, P, S or E).
```

```
Choose a hand to play:
```

```
Type R for rock, P for Paper, or S for Scissors.
```

```
When you want to stop, type E for End instead.
```

```
Your choice: e
```

```
Thank you for playing, Susie.
```

```
You won 1 hands.
```

```
I won 1 hands.
```

```
We tied. There is no winner.
```

```
Press any key to continue . . .
```

Objectives and Hints

Objectives: **while loop, switch statements**

- Use while loop to control the user selection R, P, S or E
- Use rand() function to generate the computer selection (0, 1, 3)
- Use switch statements to control computer's move
- Use nested switch statements or if / if else statements to determine the winner.
- Make sure to setup counters to count the winning numbers of the player and the computer.

More Instructions

```
***** Your name's Rock-Paper-Scissor Game *****  
(Version 2 - Input validation for each repeated loop.)
```

```
***** Your name's Rock-Paper-Scissor Game *****  
(version 1 - no input validation)
```

- Your program should NOT say `Your name's` . It should be replaced with `your first name`.

Good Luck!