1. Write a program implementing functions and if logic. The game to program will be Rock, Paper, and Scissors. It will include 2 users. The computer Hal, and you the player will enter a single character of R, P, S, or X for quit. Users can enter either lower or upper case letters and X ends the game. The program will then determine the winner or tie of the game. The format for variables and functions is as described in the pseudocode/code listed below. **You must use the code I gave you, as it is typical in industry to add to code already started.**

```c
#include <stdio.h>
#include <stdlib.h>

int checkInput(char ply1Choice);
char getHalChoice();
int processPlay(char ply1Choice, char halChoice);
int main()
{
        char ply1Choice = ' ', halChoice = ' ';
        int winner = 0, validPlay = 0;


        //assign halChoice by using a randon number generator.
        halChoice = getHalChoice();
        //user input in main  using printf, scanf
        //checkInput should check if the proper value was entered and return a 0 if

        validPlay = checkInput(ply1Choice);

        if (validPlay == 1)
                //process play returns 1 for player 1 win, 2 for player 2 win, 0 for tie.
        {
                winner = processPlay(ply1Choice, halChoice);
                //display results, will require if statements;
        }
        else
                //print game not played;
                ;
}

int checkInput(char ply1Choice)
{


        return(0);  ///this will be replaced with correct value
}


char getHalChoice()
{
        char h1;
        int choice = 0;
        choice = rand() % 3;
```

```
        switch (choice) {

        case 0:
                h1 = 'r';
                break;
        case 1:
                h1 = 'p';
                break;
        case 2:
                h1 = 's';
                break;
        default:
                h1 = 's';
        }
        return(h1);

}

int processPlay(char ply1Choice, char halChoice)
{
        return (0); ///this will be replaced with correct value
};
```