

```
import java.util.Scanner;
import java.util.Random;

/**
 * Pre-conditions:
 * User must have Java Development Kit installed to compile and run the
program.
 * The input provided by the user must be an integer (0, 1, or 2)
representing the user's choices of rock, paper, and scissors.
 * The program must have access to the java.util.Scanner and
java.util.Random libraries.
 * The game(s) must be properly initialized.
 */
public class Rockpaperscissors_game { //Defines class

    public static void minigameplayer() {
        int userChoice, computerChoice, rock, paper, scissors;
//Declares integer variables, userChoice, computer choice, rock paper,
and scissors.
        Scanner170 console = new Scanner170(System.in); //Creates
scanner object for user input/userChoice
        Random rnd = new Random(); //Creates a random object named rnd
that will use used for computer input/computerChoice

        //The following code will assign values to variables for the
choices of rock, paper, and scissors (This will correspond to user
input and output.)
        rock = 0;
        paper = 1;
        scissors = 2;

        //Display to the user from the console
        System.out.println("ROCK, PAPER, SCISSORS, GAME"); //Game name
        System.out.println("Enter your pick (0 = rock, 1 = paper, 2 =
scissors)");//Instructions on how to play for the user.

        userChoice = console.nextInt(); //Gather user input.
        while (userChoice > 2) { //Ensures that the user input must
meet the parameters of being between 0-2.
            System.out.println("Invalid Input, give number 0-2");
//Display error message in console.
            userChoice = console.nextInt(); //Accept input for user if
it meets parameters.
        }
        if (userChoice == rock) {
            System.out.println("User chose ~ROCK~"); //Displays
userChoice if ROCK (0).

        } else {
            if (userChoice == paper) {
                System.out.println("User chose ~PAPER~"); //Displays
userChoice if PAPER (1)
            } else {
                System.out.println("User chose ~SCISSORS~"); //Displays
userChoice if SCISSORS (2)
            }
        } //End of loop that displays userChoice in the console that
corresponds to variables 0-2.

        computerChoice = rnd.nextInt(3); //computerChoice is set to
choose randomly between 3 integers 0-2.
//The next loop will be used to display the computerChoice in the
console (the opponent of the user), and it will display the computers
choice in the console.

        if (computerChoice == rock) { //If the computer chooses 0,
corresponding to rock the result will be printed out in the console to
the user on a seperate line.
            System.out.println("Computer chose ~ROCK~");
        } else {
            if (computerChoice == paper) { //If the computer chooses 1,
corresponding to paper the result will be printed out in the console on
a seperate line.
                System.out.println("Computer chose ~PAPER~");
            } else {
                System.out.println("Computer chose ~SCISSORS~");//If
the computer chooses 2, corresponding to scissors the result will be
printed out in the console on a seperate line.
            }
        }

        while (userChoice == computerChoice) { //If in the instance
that the variables imputed by the user and randomly chosen by the
computer match, there is a tie.
            System.out.print("You Tied, try again"); //User is prompted
to draw again in the console.

            userChoice = console.nextInt();
            while (userChoice > 2) { //If in the instance that the
variable imputed by the user are outside of the parameter (0-2)
                System.out.println("Invalid input, provide a number 0-
2"); //User is prompted error message and to input a variable within
these parameters.
                userChoice = console.nextInt(); //Console reads the
next in range user choice.
            }
            computerChoice = rnd.nextInt(3); //computerChoice for
drawing with random int
            if (userChoice == rock) { //userChoice from variables 0-2
corresponding to variables rock, paper, scissors,
                System.out.println("User chose ~ROCK~"); //if user
chose 0, display user choice in console.

            } else {
                if (userChoice == paper) { //if userChoice is 1 = paper
                    System.out.println("User chose ~PAPER~"); //display
choice to console
                } else {
                    System.out.println("User chose ~SCISSORS~"); //if 2
(scissors) is chosen display choice to console.
                }
            }
            if (computerChoice == rock) { //Display random computer
choice to console
                System.out.println("Computer chose ~ROCK~");
            } else {
                if (computerChoice == paper) {
                    System.out.println("Computer chose ~PAPER~"); //If
paper is randomly chosen in ComputerChoice, display to user in console
as well.
                } else {
                    System.out.println("Computer chose ~SCISSORS");
//If scissors is randomly chosen (variable 2) display to user in
console.
                }
            }
        }
//Loop for result possibilities displayed to user in console.
        if (computerChoice == rock) {
            if (userChoice == paper) {
                System.out.println(" WINNER / you have defeated the
computer!"); //If computerChoice is 0, and userChoice is 1, result is a
win for the user, and Winner is displayed in console.
            } else {
                System.out.println(" LOSER / computer has won!"); //If
not tie (redraw), or userChoice is 1, when computerChoice is 0. Result
is a win for the computer, and Loser is displayed in console.
            }
        } else if (computerChoice == paper) {
            if (userChoice == rock) {
                System.out.println("LOSER / computer has won!"); //If
computerChoice is 1, and user choice is 0, this results in a win for
the computer, and Loser is displayed in console.
            } else {
                System.out.println(" WINNER / you have defeated the
computer!"); //If not tie (redraw) and user choice is 3, when computer
choice is 1, this results is a win for user, and Winner is displayed in
console.
            }
        } else if (userChoice == rock) { //If user choice is 0, and
computer choice is 2
            System.out.println(" WINNER / you have defeated the
computer!"); //Results in user Win, and Winner is displayed to the
console.
        } else {
            System.out.println("LOSER / computer has won!"); //User
must have chose, 1, this results in Computer win, and Loser is
displayed in console.
            console.close(); //Closes the scanner.
        }
    }
}

/**
 * Post-Conditions
 * The program is going to output the user's choice that the user input
choice and the computer opponent's random choice.
 * If the user's input is outside the valid range of 0-2, the program
will display an error message and prompt the user for to enter a valid
number, until it is provided.
 * The game will continue until the user and computer make different
choices, determining the winner based on standard rock-paper-scissors
rules, after resolving ties.
 * The program will conclude by displaying the outcome of the game, it
being either won, lost, or tie.
 */
}
```