



**Bharati Vidyapeeth College of Engineering**

**NAVI MUMBAI, INDIA**

Object Oriented Programming (ISL304) Mini Project

On

## **Snake Water Gun Game**

By

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## Introduction:

Snake Water Gun is one of the famous two-player game played by many people. It is a hand game in which the player randomly chooses any of the three forms i.e., snake, water, and gun. Here, we are going to implement this game using Java.

Following are the rules of the game:

- Snake vs. Water: Snake drinks the water hence wins.
  - Water vs. Gun: The gun will drown in water, hence a point for water
  - Gun vs. Snake: Gun will kill the snake and win.
- In situations where both players choose the same object, the result will be a draw.

## Source Code:

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

public class SnakeWaterGun {
    public static void main(String[] args){
        // 0 for snake
        // 1 for water
        // 2 for gun
        int n = 1;

        while (n>0) {

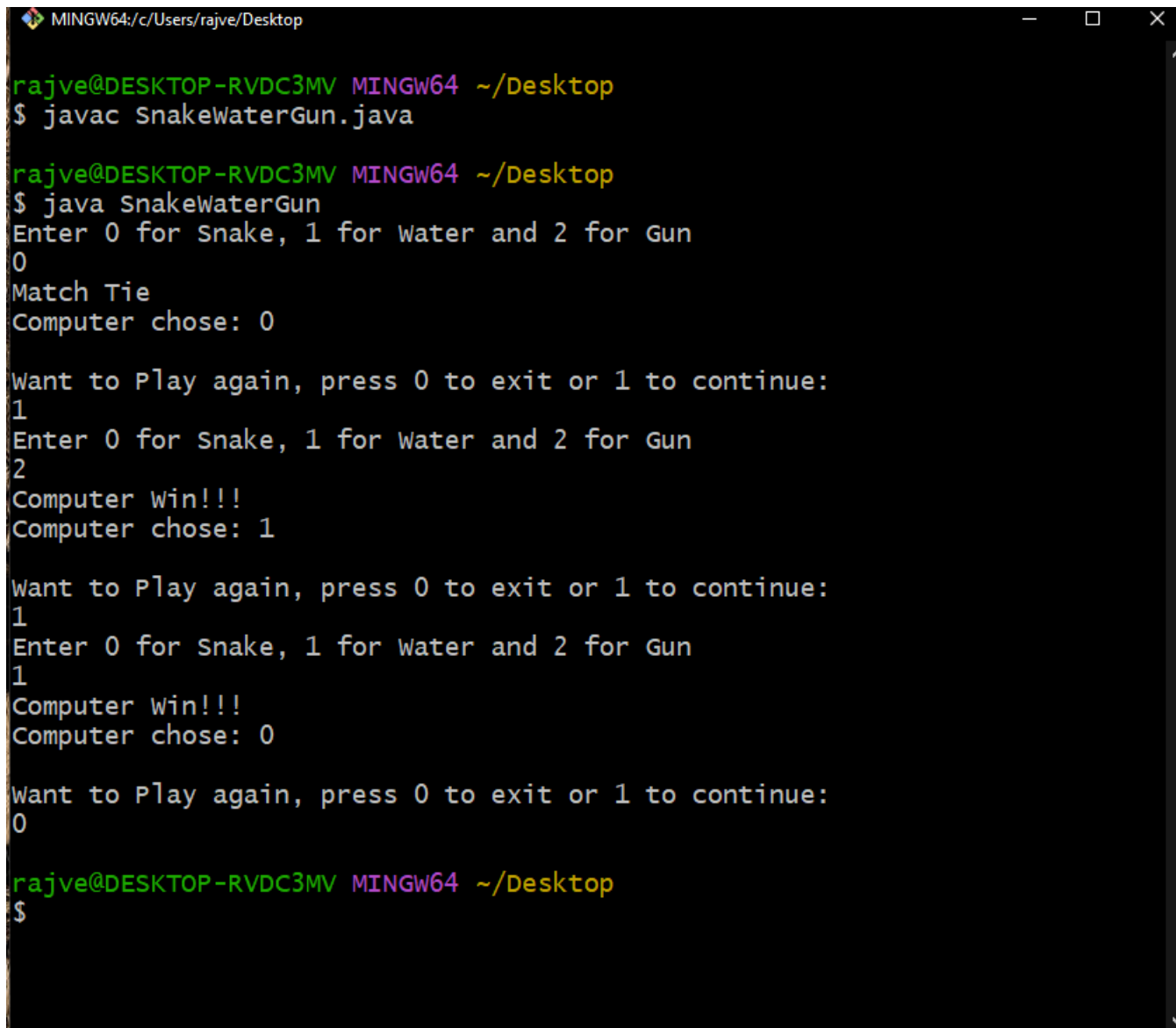
            Scanner sc = new Scanner(System.in);
            System.out.println("Enter 0 for Snake, 1 for Water and 2 for Gun");
            int user = sc.nextInt();

            Random random = new Random(); // generates a random number
            int computer = random.nextInt(3); // nextInt(x) means number will start
            from 0 with bound of (x-1)

            if (user == computer){
                System.out.println("Match Tie");
```

```
    }  
    else if (user == 0 && computer == 1 || user == 1 && computer == 2 || user  
== 2 && computer == 0 )  
    {  
        System.out.println("You Win!!!");  
    }  
    else {  
        System.out.println("Computer Win!!!");  
    }  
    System.out.println("Computer chose: " +computer);  
    System.out.println();  
    System.out.println("Want to Play again, press 0 to exit or 1 to continue: ");  
    n = sc.nextInt();  
    }  
}  
  
}
```

# Output:



```
MINGW64:/c/Users/rajve/Desktop

rajve@DESKTOP-RVDC3MV MINGW64 ~/Desktop
$ javac SnakeWaterGun.java

rajve@DESKTOP-RVDC3MV MINGW64 ~/Desktop
$ java SnakeWaterGun
Enter 0 for Snake, 1 for Water and 2 for Gun
0
Match Tie
Computer chose: 0

Want to Play again, press 0 to exit or 1 to continue:
1
Enter 0 for Snake, 1 for Water and 2 for Gun
2
Computer Win!!!
Computer chose: 1

Want to Play again, press 0 to exit or 1 to continue:
1
Enter 0 for Snake, 1 for Water and 2 for Gun
1
Computer Win!!!
Computer chose: 0

Want to Play again, press 0 to exit or 1 to continue:
0

rajve@DESKTOP-RVDC3MV MINGW64 ~/Desktop
$
```

## Logic Used (if-else-if ladder):

Decision Making in Java helps to write decision driven statements and execute a particular set of code based on certain conditions.

Java if-else-if ladder is used to decide among multiple options. The if statements are executed from the top down. As soon as one of the conditions controlling the if is true, the statement associated with that if is executed, and the rest of the ladder is bypassed. If none of the conditions is true, then the final else statement will be executed.

## Syntax:

While (Condition)

    if (condition)

        statement 1;

    else if (condition)

        statement 2;

    .

    .

    else

        statement 3;

## **Conclusion:**

Java is an object-oriented programming language. It is a general-purpose programming language, mainly designed to run developed java code on all platforms that support Java without recompilation.

This project helps developers develop real-world projects to hone their skills and materialize their theoretical knowledge into practical experience and also the user can use it to create an online game with GUI which will make it user friendly and can be used in any platform.