File - C:\CSC120\Sulley_Lab07\src\Die.java

```java
import java.util.*;
public class Die {

    private int numSides; // Number of sides the Die has
    private int currentValue; // Top value of the Die

    /**
     * Die object constructor
     * @param sides number of sides the die has
     */
    Die(int sides){

        numSides = sides;
        currentValue = (int) Math.random() * numSides;

    }

    /**
     * default Die object constructor
     * default number of sides is 6
     */
    Die(){

        numSides = 6; //default number of sides
        currentValue =  (int) Math.random() * numSides;

    }


    /**
     * rolls the Die
     * sets current value to a new value in the range o 1 to numSides
     */
    public void roll(){
        Random rand = new Random();
        int newValue = rand.nextInt(numSides);
        currentValue = newValue + 1;
    }

    /**
     * getter method for current value
     * @return Current value of this Die Object
     */
    public int getValue(){
       return currentValue;
    }
}

```

```java
/**
 * Author: Ian Sulley
 *
 * Honor Code: I affirm that I have carried out the attached academic endeavors with full academic honesty,
 * in accordance with the Union College Honor Code and the course syllabus.
 */


import java.util.Scanner;

public class Client {
    /**
     *main die game
     *
     * rolls a 6 sided die and a 12 sided die
     * if the 2 * 6 sided die value euquals ther 12 sided die value
     * the game ends
     *
     * @param args None
     */
    public static void main(String[] args){

        boolean gameOver = false; // intial the game as not over

        while(!gameOver) { //while the game is not over keep playing!

            Die die1 = new Die(); //new 6 sided die object
            Die die2 = new Die(12); //12 sided die object

            //roll each die
            die1.roll();
            die2.roll();

            //hold on to the values of each die
            int die1Value = die1.getValue();
            int die2Value = die2.getValue();

            //Print the results of the roll
            System.out.print("Die 1 (6 sided die value): ");
            System.out.println(die1Value);
            System.out.print("Die 2 (12 sided die value): ");
            System.out.println(die2Value);



```

```
46              if(die1Value * 2 == die2Value){ //see if game
    is won or not
47                      gameOver = true; //if the game is won
    , it is over
48                      System.out.print(" Die 1 times 2
    equals Die 2. Congratulations, you win!");
49              }
50
51              else{
52                  gameOver = false; //else you keep playing!
53                  System.out.print("Press enter/return to
    continue");
54                  Scanner myScanner = new Scanner(System.in
    ); // new scanner object
55                  myScanner.nextLine(); // user input
56              }
57
58          }
59      }
60
61
62
63
64
65
66
67
68  }
69
```