```java
import java.util.Random;
/**
 * Class for Die object and its methods
 * @author Neil Daterao
 */

public class Die {

    private int numSidesOfDie;
    private int currentValOfDie;
    private final int STARTINGVALOFDIE = 1;
    private final int DEFAULTSIDESOFDIE = 6;

    /**
     * Default constructor. Initializes die object with 6 sides
     */
    public Die(){
        numSidesOfDie = DEFAULTSIDESOFDIE;
        currentValOfDie = STARTINGVALOFDIE;
    }

    /**
     * Constructor for the die object which takes in a number of sides
     * @param numberOfSidesOfDie Integer representing the number of sides of the die
     */
    public Die(int numberOfSidesOfDie) {
        numSidesOfDie = numberOfSidesOfDie;
        currentValOfDie = STARTINGVALOFDIE;

    }

    /**
     * Method that rolls the die and updates the current value of the side it lands on
     */
    public void roll() {
        Random randomSide = new Random();
        int randomSideofDie = randomSide.nextInt(
```

```
37 numSidesOfDie) + 1; //nextInt is from 0 to
   numSidesofDie - 1, thus add to max it from 1 to
   numSidesOfDie
38          currentValOfDie = randomSideofDie;
39      }
40
41      /**
42       * Gets the current value
43       * @return Returns current value of die
44       */
45      public int getValue() {
46          return currentValOfDie;
47      }
48 }
49
```

```java
import java.util.Scanner;
/**
 * Main game of die
 * @author Neil Daterao
 */
public class Client {

    public static void main(String[] args) {
        Die D6 = new Die();
        Die D12 = new Die(12);
        int currentValOfD6, currentValOfD12;
        Scanner inputChecker = new Scanner(System.in);

        System.out.println("Welcome to the game of Die! Press return to roll the dice!");
        inputChecker.nextLine();

        while (D12.getValue() != 2 * D6.getValue() && D6.getValue() != 2 * D12.getValue()) {
            D6.roll();
            D12.roll();
            currentValOfD6 = D6.getValue();
            currentValOfD12 = D12.getValue();
            System.out.println("Current Value of 6 Sided Die is: " + currentValOfD6);
            System.out.println("Current Value of 12 Sided Die is: " + currentValOfD12);
            System.out.println("Press Return to continue/roll again!");
            inputChecker.nextLine();
        }

        System.out.println("Game Over!");
        if (D12.getValue() == 2 * D6.getValue()) {System.out.println("D12 Wins!");}
        else {System.out.println("D6 Wins!"); }
    }
}

```