```
Play Game
      Do you want to play this game?
                   <u>N</u>o
            <u>Y</u>es
          Roll outcome
      Dice 1: 6
      Dice 2: 1
      Dice 3: 4
              OK
              Loser
      No matches
              OK
            Request
      Play again?
          Yes
                  <u>N</u>o
          Roll outcome
      Dice 1: 2
      Dice 2: 4
      Dice 3: 2
              OK
            WINNER
     Two of a kind
              OK
            Request
      Play again?
          <u>Y</u>es
                  <u>N</u>o
          Roll outcome
Dice 1: 6
      Dice 2: 6
      Dice 3: 6
              OK
            WINNER
     Three of a kind
              OK
 2 Jared Dyreson
 3 CWID: 889546529
```

```
vim Driver.java
 4 Driver java : A Dice rolling game using Math.random and JOptionPane
 5 */
 6 import javax.swing.JOptionPane;
 7 import java.lang.Math;
 8 public class Driver{
           >// get a random number between n to k
           public static int range(int floor, int celing){
11
                   return (int)(Math.random()*((celing-floor)+1))+floor;
12
13
           public static void main(String[] args){
14
                   int reply = JOptionPane.showConfirmDialog(null, "Do you want to play this game?", "Play Game", JOptionPane.YES_NO_OPTION);
15
                   // this allows for us to keep running the program until the user does not want to
16
                   boolean play_again = true;
17
                   while(play_again){
18
                           // if the intial answer was yes, then play the game
19
                           if(reply == JOptionPane.YES_OPTION){
20
                                   // get three random numbers in the range from 1-6
21
22
                                   int roll_one = range(1, 6);
                                   int roll two = range(1, 6);
23
24
25
                                   int roll_three = range(1, 6);
                                   // make a string representation of the outcome for the dialog
                                   String dice output message = "Dice 1: " + roll one + "\n" + "Dice 2: " + roll two + "\n" + "Dice 3: " + roll three + "\n";
26
                                   // all three match
27
                                   if((roll one == roll two) && (roll two == roll three) && (roll one == roll three)){
28
                                           JOptionPane.showMessageDialog(null, dice_output_message, "Roll outcome", JOptionPane.INFORMATION_MESSAGE);
29
                                           JOptionPane.showMessageDialog(null, "Three of a kind", "WINNER", JOptionPane.WARNING MESSAGE);
30
31
                                   // two of the three match
32
                                   else if((roll_one == roll_two) || (roll_two == roll_three) || (roll_one == roll_three)){
33
                                           JOptionPane.showMessageDialog(null, dice output message, "Roll outcome", JOptionPane.INFORMATION MESSAGE);
34
                                           JOptionPane.showMessageDialog(null, "Two of a kind", "WINNER", JOptionPane.WARNING MESSAGE);
35
36
                                   // no matches
37
                                   else if((roll one != roll two) && (roll two != roll three) && (roll one != roll three)){
38
                                           JOptionPane.showMessageDialog(null, dice_output_message, "Roll outcome", JOptionPane.INFORMATION_MESSAGE);
39
                                           JOptionPane.showMessageDialog(null, "No matches", "Loser", JOptionPane.ERROR MESSAGE);
40
41
                                   // check if we want to play again, if not we break from the while loop
42
                                   int play_again_message = J0ptionPane.showConfirmDialog(null, "Play again?", "Request", J0ptionPane.YES_NO_OPTION);
43
                                   if(play_again_message != JOptionPane.YES_OPTION) { break; }
44
45
                           // we don't want to play your games Jared
46
                           else if(reply == JOptionPane.NO OPTION){
47
                                   JOptionPane.showMessageDialog(null, "Smell yah later!", "Depature dialog", JOptionPane.INFORMATION_MESSAGE);
48
                                   break;
49
50
51
52 }
                                                                                                                                                                          All
                                                                                                                                                            49,1-8
```