**Exercise 5**

1. Write method run in class DiceThread. Add more variables and methods as need.

class DiceThread extends Thread

{

private int target, sum;

private PrintWriter out;

public DiceThread(String n, int t) { super(n); target = t; }

public void run()

{

/\*

Add instructions to do the following tasks:

1. Create PrintWriter object to print output to file

2. Execute a loop until sum reaches target. In each round of the loop

- roll 2 dice

- if one is odd, the other is even 🡪 add both scores to sum

- if both are even 🡪 add the bigger score to sum

- if both are odd 🡪 reset sum to 0

- print round number, dice scores, and current sum to file

3. Report number of rounds to the screen

\*/

}

}

2. Write another class that acts as main class

In main method, get a target number from user. Then create 3 DiceThreads to do the

work in (1). Each thread must print to a separate file & report the number of rounds

on the screen (in this exercise, you don’t need to order threads)

DiceThread\_3.txt

round 1 >> dice = 3, 2 sum = 5

round 2 >> dice = 5, 6 sum = 16

round 3 >> dice = 6, 1 sum = 23

round 4 >> dice = **1, 3 sum = 0**

round 5 >> dice = **5, 1 sum = 0**

round 6 >> dice = **2, 6 sum = 6**

round 7 >> dice = **5, 3 sum = 0**

round 8 >> dice = **3, 3 sum = 0**

round 9 >> dice = **5, 5 sum = 0**

round 10 >> dice = 1, 4 sum = 5

round 11 >> dice = 5, 4 sum = 14

round 12 >> dice = 5, 2 sum = 21

round 13 >> dice = **2, 4 sum = 25**

round 14 >> dice = 5, 2 sum = 32

DiceThread\_1.txt

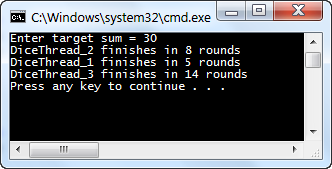
round 1 >> dice = **5, 1 sum = 0**

round 2 >> dice = 5, 6 sum = 11

round 3 >> dice = 3, 6 sum = 20

round 4 >> dice = 6, 3 sum = 29

round 5 >> dice = 3, 6 sum = 38



DiceThread\_2.txt

round 1 >> dice = 6, 3 sum = 9

round 2 >> dice = **5, 5 sum = 0**

round 3 >> dice = **3, 1 sum = 0**

round 4 >> dice = **4, 2 sum = 4**

round 5 >> dice = **4, 2 sum = 8**

round 6 >> dice = 1, 4 sum = 13

round 7 >> dice = 5, 6 sum = 24

round 8 >> dice = 3, 4 sum = 31