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Run Project – February 1, 2017

For this assignment, I implemented the Law of Large Numbers in order to estimate the longest run of consecutive values. I anticipated that this would fall in the 5-10 range, because if each outcome is equally likely to happen, the probability of rolling a high amount of consecutive numbers is very slim. The biggest issue I had was actually counting the run, and after tracing the code, I realized the error was that its placement interfered with the resetting of the count after the run had been broken. Altogether, this project took me around 20-25 minutes to complete.

**Run.java**

**import** support.MultiDie;

**public** **class** Run {

**public** **static** **void** main(String[] args) {

MultiDie coin = **new** MultiDie(2);

**int** maximum = 100;

**int** count=1;

**int** prev=0;

**int** total=1;

**for**(**int** n = 1; n <= maximum; n\*=10){

count = 1;

**for**(**int** i = 1; i <= n; i++){

coin.roll();

**if** (coin.getFaceValue() == prev){

count++;

**if** (count > total)

total = count;

}

**else**

count = 1;

prev = coin.getFaceValue();

}

}

System.***out***.println("The longest run is: "+total);

}

}

**Sample Output**

The longest run is: 8

The longest run is: 9

The longest run is: 7