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### Lab 3 Reflection

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#### Test Plan:

| Sides #           | Loaded       | Turns # | Expected Results                              | Results            | Passed?   |
|-------------------|--------------|---------|---|--------------------|---|
| P1:10<br>P2:10    | P1:N<br>P2:N | 10,000  | Even results                                  | P1:4512<br>P2:4523 | Pass. There is almost a 10% tie rate on a 10 sided die.   |
| P1:10<br>P2:12300 | P1:N<br>P2:N | 100     | P2 wins by a lot                              | P1:0<br>P2:100     | Pass. Using a 12,300 sided die vs a 10 sided should give P2 a 1230:1 ratio of winning.  |
| P1:10<br>P2:10    | P1:Y<br>P2:N | 10      | P1 wins                                       | P1:4<br>P2:5       | Toss up. In my program, loaded only gives a 10% boost on a 10 sided die, and even less at higher numbers due to it just adding 1 to the roll. |
| P1:10<br>P2:10    | P1:Y<br>P2:N | 100     | P1 wins by around 10%                         | P1:55<br>P2:38     | Pass. P1 won by around the 10% expected.  |
| P1:0<br>P2:0      | P1:0<br>P2:0 | 100     | Random sides and loaded values picked and run | P1:5<br>P2:90      | Pass. Program picked random numbers and ran correctly.  |
| P1:-3<br>P2:1     |              |         | Program notices side numbers are not valid.   |                    | Pass. Program asked for new inputs.   |

#### Reflection:

I decided to pass a random int from the Game class to the getRoll function and then using that random int, seed the srand in the getRoll functions. I believe that this added a larger random element to the number selected because it randomized random more than initializing srand with potentially the same time stamp each time within the getRoll functions.