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CS 162 W17

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Lab 3 Test Plan

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| **Test Case** | **Input Values** | **Expected Outcomes** | **Observed Outcomes** |
| player 1 loaded, player 2 not loaded. 20 sides for both, 50 rounds | p1Loaded = 1, p2Loaded = 2, sides = 20,  rounds = 50- | Player 1 will win more rounds  Player 2’s rolls will average around 10 (50% of 20)  Player 1 will average anywhere from 13-15,  Which is about 75% of the max number | Player 1 won 34 rounds  Player 2 won 14 rounds  Player 1 averaged 14.88  Player 2 averaged 12 |
| Both players loaded  10 sides each  50 rounds | p1Loaded = 1  p2Loaded = 1  sides = 10  rounds = 50 | Their scores will be pretty close, ̴15 wins each  The rest will be draws  They should both average about 7.5 per roll | Player 1 won 18 rounds  Player 2 won 13 rounds  19 draws  Player 1 averaged 8.32  Player 2 averaged 7.34 |
| Both players not loaded,  10 sides each,  50 rounds | p1Loaded = 2  p2Loaded = 2  sides = 10  rounds = 50 | Their scores will be close, about 25 wins each  Not many draws  Average about 5.5 per roll | Player 1 won 22 rounds  Player 2 won 23 rounds  5 draws  Player 1 averaged 5.72  Player 2 averaged 5.74 |
| Player 1 15 sides, Player 2 10 sides,  Both not loaded,  50 rounds | p1Sides = 15  p2Sides = 10  p1Loaded & p2Loaded = 2  rounds = 50 | Player 1 will win about 30 rounds  Player 1 will average about 8 per roll  Player 2 will average about 5.5 per roll | Player 1 won 30 rounds  Player 2 won 18 rounds  Player 1 averaged 7.98  Player 2 averaged 5.9 |
| Player 1 50 sides,  Player 2 10 sides, neither loaded,  50 rounds | p1Sides = 50  p2Sides = 10  p1Loaded & p2Loaded = 2  rounds = 50 | Player 1 will win more than 40 rounds  Player 1 will average about 25 per roll  Player 2 will average about 5.5 per roll | Player 1 won 45 rounds  Player 2 won 2 rounds  Player 1 averaged 24.44  Player 2 averaged 5.84 |
| Player 1 15 sides,  Player 2 10 sides, player 1 not loaded,  Player 2 loaded  50 rounds | p1Sides = 15  p2Sides = 10  p1Loaded = 2 p2Loaded = 1  rounds = 50 | Both player will win about 20 rounds  Both players will average about 7.5 per roll  There will be less draws than when they have equal sides | Player 1 won 27 rounds  Player 2 won 19 rounds  Player 1 averaged 8.34  Player 2 averaged 7.16 |