**Step 1: Replication**

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| **Bug Number 4** | | Simulation turns are not random. | | |
| **Bug Description** | | Crown and Anchor games consist of multiple rounds in which 3 dice are rolled in each round. In the simulation, this is not the case – each game consists of rounds with the same dice values.  I worry some smart player might notice this and clean up! | | |
| **Reproduction Test Description:** | | Run simulation, find instance where player wins on one match and compare balance to previous balance. | | |
| **Pre-conditions** | | N/A | | |
| **Post-conditions** | | N/A | | |
|  | **TEST STEP** | | **EXPECTED TEST RESULTS** | |
|  | Run the simulation (execute Main.main()). | | Simulation starts & prints output of simulation (100 games and stats) to console. |  |
|  | Scroll to end (end of simulation) of output in console. | | Output ends with stats on the overall simulation – with the last line showing the win count, lose count and win+lose ratio. |  |
|  | Scroll up until the start of the last game begins. | |  |  |
|  | Review the values rolled in each turn. | | The values rolled in each turn should be the same. |  |

**Step 2: Simplification**

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| **Automated Test** | TestBug4 |
| **Test Description** | Given a game of ten rounds, the dice values rolled should not be the same in all rounds. |
| **Test Output** | Test fails – all ten rounds have same values. |