Debugging Log

**Assignment 2**

ITC515 – Professional Programming Practice

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# Debugging Log

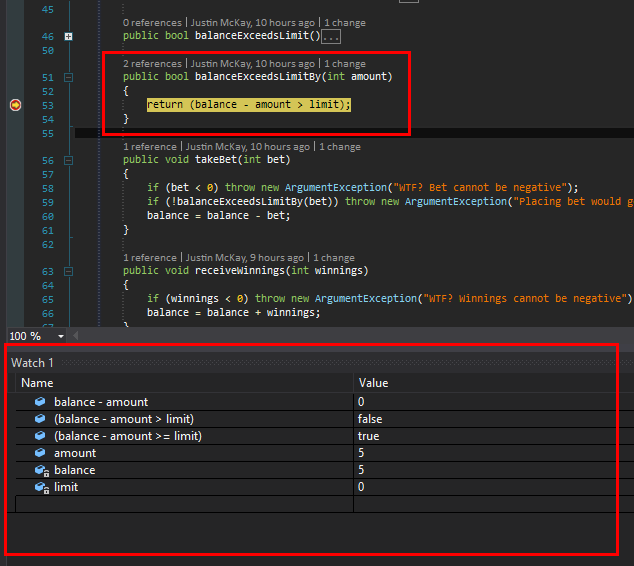
## BUG001 - Game does not pay out at correct level

### Steps taken to trace error

* Check *Player.receiveWinnings* method. Method appears to add winnings to balance correctly.
* Check *Game.playRound* method. Note: playRound method calls the takeBet method prior to testing the rolled dice against the value selected.

## BUG002 - Player cannot reach betting limit

### Steps taken to trace error

* Check *Player.takeBet* method. Noticed *Player.balanceExceedsLimitBy method* will prevent the bet from being taken if false is returned.
* Step into *Player.balanceExceedsLimitBy* method. Notices that the method will only return true (and allow the player to take a bet) if the balance – bet is greater than 0 (so that you can’t end up with a negative limit). However, as the limit is 0, this method should be checking for balance – bet is greater than *or equal to* the betting limit.
* This behaviour is confirmed with the following debugger screenshot:  
  

### Bug Elimination Steps

To fix the bug, the following code needs to be updated:

**Player.cs:**Change line 53 to be amount >= limit

### Possible Code Refactoring Improvements

Consider renaming method from balanceExceedsLimit to balanceReachesLimit so that it’s slightly clearer to the developer that the balance can reach (equal to) or exceed (greater than) the limit.

## BUG003 - Odds in game do not appear to be correct