H1: Bug exists within a while loop of the main method which utilizes the Boolean result of the player.ExceedsLimitBy method. Therefor the bug originates from the exceedsLimitBy method of the Player class.

Test: check Balance and Limit before and after the while loop

Prediction: Before Loop – player.balance = 100, limit = 0.  
 After Loop – player.balance = 5, limit = 0.

Result: Balance and limit values are as expected. As the balance is not greater than 200, the Boolean player.exceedsLimitBy(bet) within the while loop is returning false when the bet is 5 and player.balance is 5. Therefor the bug is within exceedsLimitBy.