**The Slump**: I wanted to measure the relationship of fielding errors vs on base percentage for the player. I want to measure the relationship between the two variables to see if psychology plays a role in performance. If the player is making more fielding errors, then I predict that their on base percentage will decrease, due to the “slump” mindset. Chi-squared independence test

**Home field Advantage:** I wanted to see if “home field advantage” is an actual advantage. I would measure the number of fielding errors that occurred only during home games. I use a t-test to compare the fielding errors for home games for the best and worst team (in terms of wins/losses) in the league for 2016 during the regular season. T-test

**Pitching Endurance:** When the pitcher throws more pitches are they more likely to throw a pitch that will be hit for a homerun? I want to measure if more homeruns are hit when more pitches were thrown. I will calculate the average number of pitches thrown per game for a starter and relieving pitcher to determine a baseline for number of pitches thrown per game. I will then plot the data points for each pitching type to see if there is a correlation between number of pitches thrown and number of homeruns hit.

**Runner Utility:** A great way to measure offensive utility is to see if when a player scores if they get on base? I want to compare the percentage I can calculate the linear regression to see if there is a correlation between a sacrifice hit leads to a run batted in