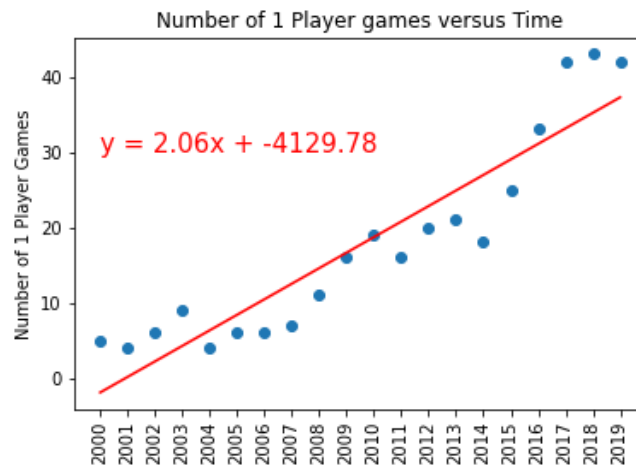


Project Description & Outline: Using Board Game Atlas, a popular forum for rating games and connecting with other gamers, we will look into board game trends over the last five years and see how those compare to prior years.

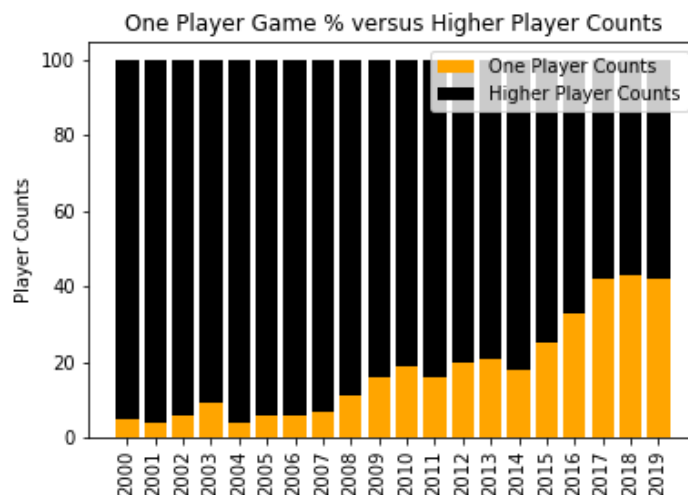
Question 1:

Has the prevalence of one player games increased over time in the top 100 games of each year?

- Null Hypothesis - If one player games have not become more prevalent over time, then the percentage of games allowing one player will not have increased over time.
- Alternate Hypothesis - If one player games have become more prevalent over time, then the percentage of games allowing one player will have increased over time.



As noted by an r-value of 0.92, there is a strong positive correlation between years and the number of one player games in the top 100 games. On average, one can expect to find about two more games playable by one person than in the previous year.

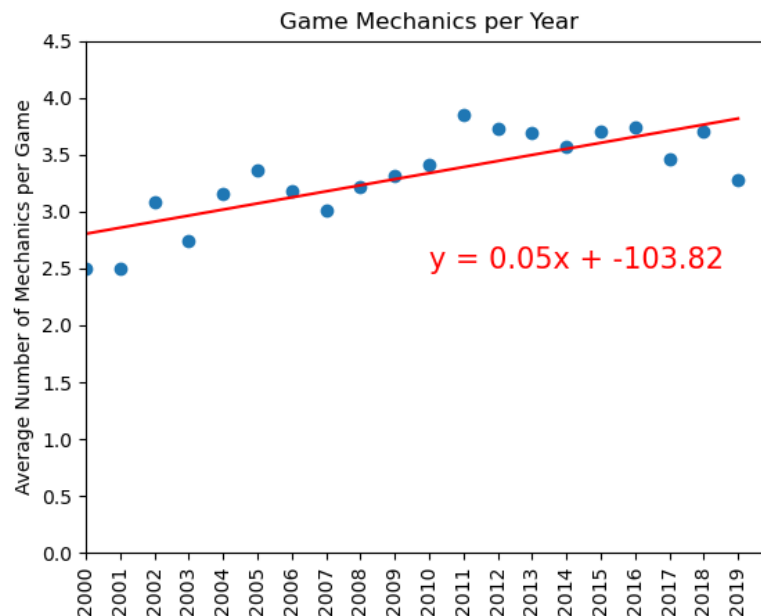


Above a second way to view the previous data. By creating a stacked bar graph, you can quickly see the increase in percent of one player games over time. Because our data analyzed the top 100 board games, this data remains consistent with the prior look at counts; however, this would be alternative way to view the data with a bigger source.

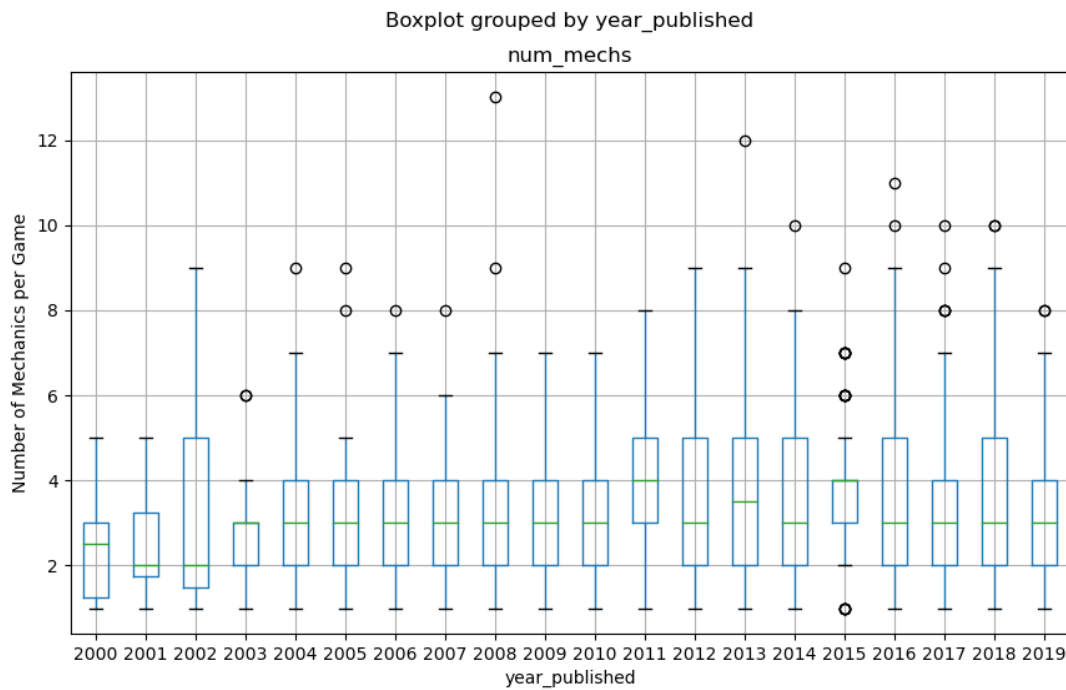
Question 2:

Have games become more mechanically complex over time in the top 100 games of each year?

- Null- If games have not become more mechanically complex over time, then the average number of mechanics per game will not increase year over year.
- Alternate- If games have become more mechanically complex over time, then the average number of mechanics per game will increase year over year.



As noted by an r-value of 0.79, there is a strong positive correlation between years and the number of one player games in the top 100 games. While the increase over time is not drastic, over the 20-year period examined, games, on average, have one additional mechanic each.



To determine whether the above finding is significant, an ANOVA test was ran, providing a p-value of 0.004. A p-value that low shows that the increase in mechanics over time is statistically significant. The box-plot above gave a visual representation of the ranges of game mechanics during the test period.