Hypothesis:

1. Is it profitable to bet on home teams, that are underdogs, to win the game outright?

2. Is it profitable to bet on home teams, that are underdogs, to win the game outright, if the home team was on a ‘bye’ the week before?

Where I gathered my data: <https://collegefootballdata.com/exporter/lines?seasonType=regular>

How: I queried it from the website by year, and this provided me with a .csv file of every gambling line of the regular season from that year.

After combining every year into one database, I had a total of 33,780 rows of data. This felt like a lot of games for an ~ 11-year time span, so I had to check for duplicates in my data. This resulted in me realizing that my data had ~20,000 duplicate lines. This is because my data source logged betting lines for the same games from different providers (i.e. one from FanDuel, DraftKings, MGM, etc.). I resolved this data integrity issue by creating a new table called unique\_lines.

Then I created a table called home\_underdogs. I created this table by taking every game where the formatted spread was ‘away\_team –‘. This generated 3945 results [insert WinsvLossGraph\_cleaned.png].

Finally, I was able to tackle some of my hypotheses. I began by just finding the mean, mode, and median spreads of home underdog winners.

Mean: 6.21

Mode: 3

Median: 5

These did not feel very descriptive but were insightful for where I ought to be looking to find profitable trends.

I decided to create a query to find all the winners, losers, total games, Moneyline values, and profitability of every single spread from 0.5-10.5. This is where I began to find interesting results.

To explain the value section the number represents the amount of profit you could expect to see for every dollar bet. So, if you bet every Moneyline on teams that are home underdogs by 6.5 points, you could expect a return of $24.20 for every $1 put in (not financial advice).

These results made me question if a team coming off a bye week would be even more profitable, so I ran the same test while cross referencing the team’s schedules.

These results were surprisingly underwhelming for how profitable the home underdogs were.