Introduction.
The data we are working with operates globally, with its original and largest presence in the US. We would like to focus on comparing the difference in average return per year for the companies which have more than 5 B in Cash and Equivalents (A component of Assets representing the amount of currency on hand as well as demand deposits with banks or financial institutions).
We are focused on these stocks, as we feel these would be the easiest to observe across the market.
We have data from: https://www.quandl.com/
The data includes: ticker, revenue, calendardate, price, cash availability - these are essential columns we will work with.
Here's the link to the dataset: aggdata (1).xlsx if this doesn't open because of the size, try this one, please:
https://github.com/Gaukhar-ai/for_my_Thinkful_work/blob/master/capstone/ab_edited.csv

This is the link to abbreviations and their meanings indicators.xlsx

Hypothesis. Given our general research questions that are based on some interesting observation or outside trend, our next step is to formally state which hypotheses we want to test.

Ho – there's no significant difference in the companies' average return which have more than 1B in cash by the end of the year.

Ha – There is a significant difference in the companies' average return which have more than 1B in cash by the end of the year.

I'm planning to apply the t-test for this hypothesis.
- For doing so I need to clear up my data from NA values, clean the numeric columns(i.e. do stocks have > 1B and have the number columns be a numeric datatype).
- Next we create an indicator to label companies based on whether they have > 1B in cash assets.
- We split the data into two groups (these are dependent groups)
- Group 1: stock info at the end of the Q1 2018 for companies above threshold.
- Group 2: stocks info at the end of the Q1 2019 for companies above threshold.
- Check for normality of the difference between the two groups.
- Run the appropriate hypothesis test based on the assumption checks.

This hypothesis is great for institutional investors, for financial institutions, for independent traders, for long term investors and for everyone who's interested in putting their money in stable companies for a year. It could clearly present if you have an edge while investing for one year in stocks which possess more than 1 B in assets or not.