Capstone Two Project Proposal

- Problem Statement Hypothesis:
    - What kind of prediction model with an accuracy of 80% or more, can we make that can help us increase profits in geographical areas and predict future sales trends in the next 30 days?
- Context:
    - With growing demands and an increase in competition in the market, a Superstore would like to understand which products, regions, categories and customer segments they should target or avoid to boost profitability for the store.
- Criteria For Success:
    - Find the patterns: When do people buy the most? Which months or seasons matter?
    - Find which products, regions, and customers are truly profitable.
    - Which products are dragging us down?
    - What type of model can we make to predict future sales trends?
    - Can we produce a model that has an accuracy of 80% or more in the next 30 days?
- Scope of solution space:
    - In order to figure out what kind of model we need to make to predict future sales trends, we need to go through the dataset and perform exploratory data analysis to find out what is really driving profitability and find out the relationship between customers, products, and sales in each region. Once we have collected what we need, we will apply machine learning techniques to train and test the data.
- Constraints within solution space:
    - We may have issues determining the kind of model we need to make to predict future sales trends.

    - We may have issues finding the exact metric that is driving profitability for the store.

- Stakeholders:
    - Director of Operations
    - Director of Sales
    - Director of Marketing
- Key Data Sources:
    - https://www.kaggle.com/datasets/vivek468/superstore-dataset-final/data