**Presentation Rough Draft**

* (5 min) Introduction – *5 slides*
  + Team Members *(1 Slide –* All*)*
  + Data & Questions – (*1 slide –* Sara)
    - Datasets
      * USDA Kaggle / Govt. Website
      * Honey Production
    - Evaluation Questions
      * Does honey production correlate with the production of any other USDA commodities in your category/group? Which are more highly correlated?
      * How have the production levels of each commodity in your category changed over time?
      * Can we make any predictive analyses about honey production based on correlation patterns?
  + Tools & Methods (*1 slide –* Nic)
    - Tools Bulletpoints
    - Methods Bulletpoints
* (5 min) Background
  + Background on Honey Production *(1 Slide* – Sonya)
    - Background Bullet Point(s)
      * Why is that important for US agriculture?
    - Area Heat Map
      * States producing most honey bulletpoint
  + US Agriculture stats *(1 slide –* Sindy)
    - Pie Chart Visual
      * Biggest Producing Crops in US bulletpoints
      * % of Honey Production in US against all commodity production in US
  + Production Values over time – *(1 slide –* Neha)
    - Honey production from 1998-2012 has been declining roughly at a rate of (slope) metric tons per year
      * Line graph
* (10-12 min) Let’s look at commodity correlations, regressions equation, supportive evidence
  + Category Introduction (*1 Slide* - Sara)
    - Commodity categories
    - Ran correlation matrix to find highest correlated
    - Singled them out and ran linear regressions on most correlated to find relationship with honey
  + Cat 1 – Nic *(1 slide)* 
    - Dairy & Swine
      * Pretty Correlation Graphic
      * Linear Regression Scatterplot Image (Tableau)
      * Y = MX + B equations
      * Confidence Intervals & Adjusted R2 Values
  + Cat 2 – Sindy *(1 slide)*
    - *Corn, Grapefruit, Apples*
      * Pretty Correlation Graphic
      * Linear Regression Scatterplot Image (Tableau)
      * Y = MX + B equations
      * Confidence Intervals & Adjusted R2 Values
  + Cat 3 – Neha *(1 slide)*
    - *Barley, Oats, Rye*
      * Pretty Correlation Graphic
      * Linear Regression Scatterplot Image (Tableau)
      * Y = MX + B equations
      * Confidence Intervals & Adjusted R2 Values
  + Cat 4 – Sara *(1 slide)*
    - *Almonds, Walnuts, Soybean Oil, Rapeseed Oil*
      * Correlation Percentages Pretty Image
      * Linear Regression Scatterplot Image (Tableau)
      * Y = MX + B equations
      * Confidence Interval & Adjusted R2 Value
  + Cat 5 – Sonya *(1 slide)*
    - *Coffee*
      * Correlation Percentages Pretty Image
      * Linear Regression Scatterplot Image (Tableau)
      * Y = MX + B equation
      * Confidence Interval & Adjusted R2 Value
  + Most highly rated with honey: *(1 Slide -* Nic*)*
    - 13 Highest % Listed on right: Almonds, Barley, etc.
    - What does that mean for the future?
* (5 minutes) Predictive analysis
  + ARIMAs & 2023 Honey Predictions *(1 slide –* Neha*)*
    - ARIMA example
    - Honey 2023 Forecast Table
  + Scatterplot/K-means cluster *(1 slide -* Sonya*)*
    - Forecast findings
    - Groups & Centerpoint
    - High predictors vs low predictors
* (2 minutes) Afterthoughts *(1 slide -* Sindy*)*
  + Quick recap of major findings
  + Conclusions
* (2 minutes) Limitations & Closing Statements *(1 slide -* Sara*)*
  + Data Limitations
  + Where to go next
* (2 minutes) Questions? (*1 slide*)