Written Final Report:

1. PSSA Scores for Pennsylvania Counties
   1. <https://www.education.pa.gov/DataAndReporting/Assessments/Pages/PSSA-Results.aspx>
2. Census Income Data for Pennsylvania by County
   1. <https://data.census.gov/cedsci/table?t=Income%20%28Households,%20Families,%20Individuals%29%3AIncome%20and%20Earnings%3AIncome%20and%20Poverty&g=0400000US42,42%240500000&tid=ACSST1Y2019.S1902>

Data Wrangling:

1. Extract (Extracting Data from Existing Location)
   1. Found Income data in Census.gov
   2. Came up hypothesis to compare to Score data found in education.pa.gov
   3. Jupyter Notebook
      1. Read in CSVs
      2. Put into Pandas dataframe
2. Transform (Cleaning, Joining, Filtering, Aggregating, etc)
   1. Jupyter Notebook
      1. Split Columns to get County specific data
      2. Appended dataframe with new county column
      3. Filtered data down to county and median income
      4. Checked for duplicate values
3. Load (Load to a database – relational / nonrelational)
   1. PgAdmin(SQL)
      1. Merge Score data with the Income Data to get complete dataframe
      2. Made table that contained Math scores and Income by county for further analysis
         1. Made tables containing average score for multiple grade levels by filtering for each proficiency group
         2. Joined those newly created tables to make a complete dataframe
      3. Made table containing scores comparing areas of interest
         1. Filtered data based on areas of interest
         2. Used Order by to compare Income level to scores

Schemata used in the final production database:

* Our final production database contains straightforward data about the median housing income, test score data, and the county that relates both of those variables.
* We also took a preliminary look at how scores compare to income by making a dataframe comparing math scores to county income level, as well as comparing income from areas of interest to income level
* Further analysis can be done on these datasets in a similar fashion to obtain more interesting conclusions.