**Scenario**

You have been hired by a small investment company that manages an equity fund comprised of 150 U.S. companies across multiple industries. The fund managers are looking to rebalance the fund’s holdings and would like you to provide an analysis of the companies’ performance based on data from the most recent quarter. The data can be found in the supporting documents section as “D598 Data Set”.

To aid in your analysis you must write programs in Python or R to perform the following tasks:

•   Import the data file into a data frame.

•   Identify any duplicate rows in the data set.

•   Group all IDs by state, then run descriptive statistics (mean, median, min, & max) for all numeric variables by state and store this result as a new data frame. (Code should be modified from “D598 Task 2 Original Code” in the supporting documents section)

•   Filter the data frame to identify all businesses with debt-to-equity ratios that are negative.

•   Create a new data frame that provides the debt-to-income ratio for every business in the data set.  Debt-to-income ratio is defined as long-term debt divided by revenue.

•   Concatenate the debt-to-income ratio data frame you created with the original data frame.