

Untitled

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Section 1:

In this project, I plan to analyze the stocks of various companies (get the respective datasets of various common companies), and attempt to find the relationships between various factors such as product satisfaction and more. I will conduct several analyses of the various values of stocks of a company and these various factors and attempt to find the best-fit relationship between these factors (either linear or polynomial). Depending on this, I plan to do any additional follow up analyses in order to better understand the data. I ultimately want to answer the question about what factors make stocks successful, and what are the stocks worth buying shares from. I believe this to be important as with various economic recessions, it is important to guarantee that people are able to ensure their safety amidst the pandemic.

Section 2: I decided to use the data provided in Kaggle as part of the New York Stock exchange dataset, a collection of 4 csv files that have various information on stocks. We have multiple response variables, such as gross revenue and investments.

```
library(tidyverse)
```

```
## -- Attaching packages -----
```

```
## v ggplot2 3.3.2      v purrr  0.3.4
## v tibble  3.0.3      v dplyr  1.0.2
## v tidyr   1.1.2      v stringr 1.4.0
## v readr   1.3.1      v forcats 0.5.0
```

```
## -- Conflicts -----
```

```
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()     masks stats::lag()
```

```
fundamental <- read_csv("C:\\Users\\Anigasan\\Downloads\\archive\\fundamentals.csv")
```

```
## Warning: Missing column names filled in: 'X1' [1]
```

```
## Parsed with column specification:
```

```
## cols(
##   .default = col_double(),
##   'Ticker Symbol' = col_character(),
##   'Period Ending' = col_date(format = "")
## )
```

```
## See spec(...) for full column specifications.
```

```
prices <- read_csv("C:\\Users\\Anigasan\\Downloads\\archive\\prices.csv")
```

```
## Parsed with column specification:
## cols(
##   date = col_datetime(format = ""),
##   symbol = col_character(),
##   open = col_double(),
##   close = col_double(),
##   low = col_double(),
##   high = col_double(),
##   volume = col_double()
## )
```

```
prices2 <- read_csv("C:\\Users\\Anigasan\\Downloads\\archive\\prices-split-adjusted.csv")
```

```
## Parsed with column specification:
## cols(
##   date = col_date(format = ""),
##   symbol = col_character(),
##   open = col_double(),
##   close = col_double(),
##   low = col_double(),
##   high = col_double(),
##   volume = col_double()
## )
```

```
security <- read_csv("C:\\Users\\Anigasan\\Downloads\\archive\\securities.csv")
```

```
## Parsed with column specification:
## cols(
##   'Ticker symbol' = col_character(),
##   Security = col_character(),
##   'SEC filings' = col_character(),
##   'GICS Sector' = col_character(),
##   'GICS Sub Industry' = col_character(),
##   'Address of Headquarters' = col_character(),
##   'Date first added' = col_date(format = ""),
##   CIK = col_character()
## )
```

I will utilize a model that will be able to fit linearly or polynomial depending on the relationship. Since these are samples of people who invested into the respective companies, I plan to analyze whether these relationships are significant or not first. I will look at various transformation in order to ensure the proper transformation, if necessary.

Section 3:

```
summary(fundamental)
```

##	X1	Ticker Symbol	Period Ending	Accounts Payable
##	Min.	: 0 Length:1781	Min. :2003-06-30	Min. :0.000e+00

```

## 1st Qu.: 445    Class :character    1st Qu.:2013-12-31    1st Qu.:5.160e+08
## Median : 890    Mode  :character    Median :2014-12-31    Median :1.334e+09
## Mean   : 890                                Mean   :2014-10-26    Mean   :4.673e+09
## 3rd Qu.:1335                                3rd Qu.:2015-12-31    3rd Qu.:3.246e+09
## Max.   :1780                                Max.   :2017-01-01    Max.   :2.069e+11
##
## Accounts Receivable Add'l income/expense items After Tax ROE
## Min.   :-6.452e+09 Min.   :-6.768e+09    Min.   : 0.0
## 1st Qu.: -1.040e+08 1st Qu.: -2.638e+06    1st Qu.: 10.0
## Median : -1.830e+07 Median : 2.000e+06    Median : 16.0
## Mean   : -6.353e+07 Mean   : 6.909e+07    Mean   : 43.6
## 3rd Qu.: 7.816e+06 3rd Qu.: 3.359e+07    3rd Qu.: 26.0
## Max.   : 2.266e+10 Max.   : 1.416e+10    Max.   :5789.0
##
## Capital Expenditures Capital Surplus    Cash Ratio
## Min.   :-3.798e+10 Min.   :-7.215e+08    Min.   : 0.00
## 1st Qu.: -1.151e+09 1st Qu.: 4.791e+08    1st Qu.: 17.00
## Median : -3.580e+08 Median : 1.997e+09    Median : 41.00
## Mean   : -1.252e+09 Mean   : 5.352e+09    Mean   : 74.46
## 3rd Qu.: -1.291e+08 3rd Qu.: 5.735e+09    3rd Qu.: 90.00
## Max.   : 5.000e+06 Max.   : 1.083e+11    Max.   :1041.00
##                                     NA's :299
## Cash and Cash Equivalents Changes in Inventories Common Stocks
## Min.   :2.100e+04    Min.   :-5.562e+09    Min.   :0.000e+00
## 1st Qu.:3.088e+08    1st Qu.: -5.400e+07    1st Qu.:1.628e+06
## Median :8.626e+08    Median : 0.000e+00    Median :7.725e+06
## Mean   :8.521e+09    Mean   :-6.788e+07    Mean   :1.609e+09
## 3rd Qu.:2.310e+09    3rd Qu.: 0.000e+00    3rd Qu.:2.970e+08
## Max.   :7.281e+11    Max.   : 3.755e+09    Max.   :1.581e+11
##
## Cost of Revenue    Current Ratio    Deferred Asset Charges
## Min.   :0.000e+00    Min.   : 17.0    Min.   :0.000e+00
## 1st Qu.:1.194e+09    1st Qu.: 109.0    1st Qu.:0.000e+00
## Median :3.685e+09    Median : 152.0    Median :0.000e+00
## Mean   :1.235e+10    Mean   : 186.8    Mean   :5.908e+08
## 3rd Qu.:9.801e+09    3rd Qu.: 226.0    3rd Qu.:1.471e+08
## Max.   :3.651e+11    Max.   :1197.0    Max.   :3.686e+10
##                                     NA's :299
## Deferred Liability Charges Depreciation
## Min.   :0.000e+00    Min.   :-4.480e+08
## 1st Qu.:0.000e+00    1st Qu.: 1.799e+08
## Median :2.060e+08    Median : 4.280e+08
## Mean   :1.611e+09    Mean   : 1.084e+09
## 3rd Qu.:1.083e+09    3rd Qu.: 1.047e+09
## Max.   :5.618e+10    Max.   : 2.952e+10
##
## Earnings Before Interest and Tax Earnings Before Tax Effect of Exchange Rate
## Min.   :-2.793e+10    Min.   :-2.823e+10    Min.   :-3.067e+09
## 1st Qu.: 5.852e+08    1st Qu.: 4.900e+08    1st Qu.: -2.000e+07
## Median : 1.139e+09    Median : 9.601e+08    Median : -6.000e+05
## Mean   : 2.710e+09    Mean   : 2.375e+09    Mean   : -3.849e+07
## 3rd Qu.: 2.586e+09    3rd Qu.: 2.255e+09    3rd Qu.: 0.000e+00
## Max.   : 7.905e+10    Max.   : 7.873e+10    Max.   : 1.160e+09
##

```

##	Equity Earnings/Loss	Unconsolidated	Subsidiary	Fixed Assets
##	Min. : -1.633e+09			Min. : 0.000e+00
##	1st Qu.: 0.000e+00			1st Qu.: 5.920e+08
##	Median : 0.000e+00			Median : 2.089e+09
##	Mean : 9.134e+07			Mean : 8.534e+09
##	3rd Qu.: 0.000e+00			3rd Qu.: 9.231e+09
##	Max. : 1.501e+10			Max. : 2.527e+11
##				
##	Goodwill	Gross Margin	Gross Profit	Income Tax
##	Min. : 0.000e+00	Min. : 0.00	Min. : -1.265e+10	Min. : -8.013e+09
##	1st Qu.: 1.222e+08	1st Qu.: 29.00	1st Qu.: 1.582e+09	1st Qu.: 1.030e+08
##	Median : 1.260e+09	Median : 43.00	Median : 2.991e+09	Median : 2.689e+08
##	Mean : 3.930e+09	Mean : 46.76	Mean : 7.189e+09	Mean : 6.694e+08
##	3rd Qu.: 4.091e+09	3rd Qu.: 64.00	3rd Qu.: 6.944e+09	3rd Qu.: 6.264e+08
##	Max. : 1.046e+11	Max. : 100.00	Max. : 1.495e+11	Max. : 3.104e+10
##				
##	Intangible Assets	Interest Expense	Inventory	
##	Min. : 0.000e+00	Min. : 0.000e+00	Min. : 0.000e+00	
##	1st Qu.: 0.000e+00	1st Qu.: 3.005e+07	1st Qu.: 0.000e+00	
##	Median : 3.180e+08	Median : 1.223e+08	Median : 3.804e+08	
##	Mean : 1.964e+09	Mean : 3.263e+08	Mean : 1.467e+09	
##	3rd Qu.: 1.474e+09	3rd Qu.: 3.200e+08	3rd Qu.: 1.467e+09	
##	Max. : 1.207e+11	Max. : 2.061e+10	Max. : 4.726e+10	
##				
##	Investments	Liabilities	Long-Term Debt	
##	Min. : -1.651e+11	Min. : -4.017e+10	Min. : 0.000e+00	
##	1st Qu.: -2.150e+08	1st Qu.: -5.484e+07	1st Qu.: 1.107e+09	
##	Median : -9.700e+04	Median : 2.700e+07	Median : 3.346e+09	
##	Mean : -9.679e+08	Mean : 1.790e+08	Mean : 8.477e+09	
##	3rd Qu.: 9.000e+06	3rd Qu.: 1.777e+08	3rd Qu.: 7.781e+09	
##	Max. : 3.835e+10	Max. : 3.710e+10	Max. : 4.292e+11	
##				
##	Long-Term Investments	Minority Interest	Misc. Stocks	
##	Min. : 0.000e+00	Min. : -1.050e+08	Min. : -151000000	
##	1st Qu.: 0.000e+00	1st Qu.: 0.000e+00	1st Qu.: 0	
##	Median : 9.260e+07	Median : 1.000e+06	Median : 0	
##	Mean : 2.321e+10	Mean : 4.167e+08	Mean : 42436180	
##	3rd Qu.: 1.488e+09	3rd Qu.: 8.500e+07	3rd Qu.: 0	
##	Max. : 1.652e+12	Max. : 6.319e+10	Max. : 3713000000	
##				
##	Net Borrowings	Net Cash Flow	Net Cash Flow-Operating	
##	Min. : -9.909e+10	Min. : -4.293e+10	Min. : -1.606e+10	
##	1st Qu.: -7.340e+07	1st Qu.: -1.550e+08	1st Qu.: 6.642e+08	
##	Median : 1.063e+08	Median : 1.000e+07	Median : 1.237e+09	
##	Mean : 5.155e+08	Mean : 5.273e+07	Mean : 3.258e+09	
##	3rd Qu.: 7.810e+08	3rd Qu.: 2.457e+08	3rd Qu.: 3.049e+09	
##	Max. : 4.971e+10	Max. : 5.044e+10	Max. : 1.080e+11	
##				
##	Net Cash Flows-Financing	Net Cash Flows-Investing	Net Income	
##	Min. : -1.875e+11	Min. : -1.656e+11	Min. : -2.353e+10	
##	1st Qu.: -1.092e+09	1st Qu.: -2.296e+09	1st Qu.: 3.528e+08	
##	Median : -3.541e+08	Median : -7.568e+08	Median : 6.861e+08	
##	Mean : -4.576e+08	Mean : -2.718e+09	Mean : 1.706e+09	
##	3rd Qu.: 1.279e+08	3rd Qu.: -2.560e+08	3rd Qu.: 1.697e+09	

```

## Max. : 1.182e+11      Max. : 1.070e+11      Max. : 5.339e+10
##
## Net Income Adjustments Net Income Applicable to Common Shareholders
## Min. : -5.810e+10      Min. : -2.312e+10
## 1st Qu.: -7.200e+06      1st Qu.: 3.512e+08
## Median : 8.895e+07      Median : 6.820e+08
## Mean : 2.198e+08      Mean : 1.688e+09
## 3rd Qu.: 3.431e+08      3rd Qu.: 1.679e+09
## Max. : 1.722e+10      Max. : 5.339e+10
##
## Net Income-Cont. Operations Net Receivables      Non-Recurring Items
## Min. : -2.276e+10      Min. : 0.000e+00      Min. : -2.524e+09
## 1st Qu.: 3.534e+08      1st Qu.: 4.336e+08      1st Qu.: 0.000e+00
## Median : 6.851e+08      Median : 1.083e+09      Median : 0.000e+00
## Mean : 1.748e+09      Mean : 3.242e+09      Mean : 2.185e+08
## 3rd Qu.: 1.673e+09      3rd Qu.: 2.383e+09      3rd Qu.: 5.000e+07
## Max. : 5.989e+10      Max. : 9.282e+10      Max. : 2.090e+10
##
## Operating Income      Operating Margin      Other Assets      Other Current Assets
## Min. : -2.791e+10      Min. : 0.00      Min. : 0.000e+00      Min. : 0.000e+00
## 1st Qu.: 5.259e+08      1st Qu.: 9.00      1st Qu.: 1.070e+08      1st Qu.: 5.034e+07
## Median : 1.021e+09      Median : 15.00      Median : 4.110e+08      Median : 1.837e+08
## Mean : 2.269e+09      Mean : 18.18      Mean : 4.860e+09      Mean : 6.071e+08
## 3rd Qu.: 2.260e+09      3rd Qu.: 23.00      3rd Qu.: 1.385e+09      3rd Qu.: 5.480e+08
## Max. : 7.123e+10      Max. : 437.00      Max. : 3.256e+11      Max. : 3.509e+10
##
## Other Current Liabilities      Other Equity      Other Financing Activities
## Min. : 0.000e+00      Min. : -2.961e+10      Min. : -9.504e+10
## 1st Qu.: 0.000e+00      1st Qu.: -5.522e+08      1st Qu.: -1.900e+07
## Median : 1.287e+08      Median : -9.500e+07      Median : 0.000e+00
## Mean : 1.501e+10      Mean : -6.208e+08      Mean : 4.844e+08
## 3rd Qu.: 8.710e+08      3rd Qu.: 0.000e+00      3rd Qu.: 0.000e+00
## Max. : 1.363e+12      Max. : 3.678e+10      Max. : 8.964e+10
##
## Other Investing Activities      Other Liabilities      Other Operating Activities
## Min. : -5.672e+10      Min. : 0.000e+00      Min. : -3.367e+10
## 1st Qu.: -2.530e+08      1st Qu.: 1.790e+08      1st Qu.: -8.400e+07
## Median : -1.400e+07      Median : 6.960e+08      Median : -8.959e+06
## Mean : -4.054e+08      Mean : 9.077e+09      Mean : 7.145e+06
## 3rd Qu.: 5.000e+07      3rd Qu.: 2.587e+09      3rd Qu.: 2.650e+07
## Max. : 1.160e+10      Max. : 7.662e+11      Max. : 8.751e+10
##
## Other Operating Items      Pre-Tax Margin      Pre-Tax ROE      Profit Margin
## Min. : -8.716e+07      Min. : 0.00      Min. : 0.00      Min. : 0.00
## 1st Qu.: 0.000e+00      1st Qu.: 8.00      1st Qu.: 13.00      1st Qu.: 6.00
## Median : 7.173e+07      Median : 14.00      Median : 22.00      Median : 10.00
## Mean : 8.688e+08      Mean : 17.75      Mean : 59.65      Mean : 13.96
## 3rd Qu.: 6.080e+08      3rd Qu.: 22.00      3rd Qu.: 36.00      3rd Qu.: 17.00
## Max. : 5.487e+10      Max. : 442.00      Max. : 9089.00      Max. : 369.00
##
## Quick Ratio      Research and Development      Retained Earnings
## Min. : 10.00      Min. : 0.000e+00      Min. : -1.990e+10
## 1st Qu.: 77.25      1st Qu.: 0.000e+00      1st Qu.: 1.100e+09
## Median : 115.00      Median : 0.000e+00      Median : 3.337e+09

```

```

## Mean      : 146.95      Mean      :3.503e+08      Mean      : 9.207e+09
## 3rd Qu.: 180.00      3rd Qu.:6.541e+07      3rd Qu.: 9.012e+09
## Max.      :1197.00      Max.      :1.274e+10      Max.      : 4.124e+11
## NA's      :299
## Sale and Purchase of Stock Sales, General and Admin.
## Min.      : -5.885e+10      Min.      : -4.870e+08
## 1st Qu.: -7.495e+08      1st Qu.: 5.598e+08
## Median : -2.102e+08      Median : 1.338e+09
## Mean      : -7.652e+08      Mean      : 3.981e+09
## 3rd Qu.: 2.385e+06      3rd Qu.: 3.430e+09
## Max.      : 5.410e+09      Max.      : 9.704e+10
##
## Short-Term Debt / Current Portion of Long-Term Debt Short-Term Investments
## Min.      :0.000e+00      Min.      :0.000e+00
## 1st Qu.:4.278e+06      1st Qu.:0.000e+00
## Median :2.131e+08      Median :0.000e+00
## Mean      :3.055e+09      Mean      :1.124e+09
## 3rd Qu.:9.560e+08      3rd Qu.:2.550e+08
## Max.      :3.240e+11      Max.      :1.067e+11
##
## Total Assets      Total Current Assets      Total Current Liabilities
## Min.      :2.705e+06      Min.      :0.000e+00      Min.      :0.000e+00
## 1st Qu.:6.553e+09      1st Qu.:1.044e+09      1st Qu.:5.641e+08
## Median :1.517e+10      Median :2.747e+09      Median :1.702e+09
## Mean      :5.571e+10      Mean      :6.726e+09      Mean      :4.700e+09
## 3rd Qu.:3.600e+10      3rd Qu.:6.162e+09      3rd Qu.:4.381e+09
## Max.      :2.572e+12      Max.      :1.397e+11      Max.      :9.028e+10
##
## Total Equity      Total Liabilities      Total Liabilities & Equity
## Min.      : -1.324e+10      Min.      :2.577e+06      Min.      :2.705e+06
## 1st Qu.: 2.201e+09      1st Qu.:3.843e+09      1st Qu.:6.553e+09
## Median : 4.983e+09      Median :9.141e+09      Median :1.517e+10
## Mean      : 1.189e+10      Mean      :4.380e+10      Mean      :5.569e+10
## 3rd Qu.: 1.081e+10      3rd Qu.:2.390e+10      3rd Qu.:3.600e+10
## Max.      : 2.562e+11      Max.      :2.341e+12      Max.      :2.572e+12
##
## Total Revenue      Treasury Stock      For Year      Earnings Per Share
## Min.      :1.514e+06      Min.      : -2.297e+11      Min.      :1215      Min.      : -61.200
## 1st Qu.:3.714e+09      1st Qu.: -3.041e+09      1st Qu.:2013      1st Qu.: 1.590
## Median :8.023e+09      Median : -3.068e+08      Median :2014      Median : 2.810
## Mean      :2.029e+10      Mean      : -3.952e+09      Mean      :2013      Mean      : 3.354
## 3rd Qu.:1.749e+10      3rd Qu.: 0.000e+00      3rd Qu.:2015      3rd Qu.: 4.590
## Max.      :4.857e+11      Max.      : 0.000e+00      Max.      :2016      Max.      : 50.090
## NA's      :173      NA's      :219
## Estimated Shares Outstanding
## Min.      : -1.514e+09
## 1st Qu.: 1.493e+08
## Median : 2.929e+08
## Mean      : 6.024e+08
## 3rd Qu.: 5.492e+08
## Max.      : 1.611e+10
## NA's      :219

```

```
head(fundamental, 5)
```

```
## # A tibble: 5 x 79
##       X1 'Ticker Symbol' 'Period Ending' 'Accounts Payab~ 'Accounts Recei~
##   <dbl> <chr>          <date>          <dbl>          <dbl>
## 1     0 AAL            2012-12-31      3068000000    -222000000
## 2     1 AAL            2013-12-31      4975000000    -93000000
## 3     2 AAL            2014-12-31      4668000000   -160000000
## 4     3 AAL            2015-12-31      5102000000    352000000
## 5     4 AAP            2012-12-29      2409453000   -89482000
## # ... with 74 more variables: 'Add'l income/expense items' <dbl>, 'After Tax
## # ROE' <dbl>, 'Capital Expenditures' <dbl>, 'Capital Surplus' <dbl>, 'Cash
## # Ratio' <dbl>, 'Cash and Cash Equivalents' <dbl>, 'Changes in
## # Inventories' <dbl>, 'Common Stocks' <dbl>, 'Cost of Revenue' <dbl>,
## # 'Current Ratio' <dbl>, 'Deferred Asset Charges' <dbl>, 'Deferred Liability
## # Charges' <dbl>, 'Depreciation' <dbl>, 'Earnings Before Interest and
## # Tax' <dbl>, 'Earnings Before Tax' <dbl>, 'Effect of Exchange Rate' <dbl>,
## # 'Equity Earnings/Loss Unconsolidated Subsidiary' <dbl>, 'Fixed
## # Assets' <dbl>, 'Goodwill' <dbl>, 'Gross Margin' <dbl>, 'Gross Profit' <dbl>,
## # 'Income Tax' <dbl>, 'Intangible Assets' <dbl>, 'Interest Expense' <dbl>,
## # 'Inventory' <dbl>, 'Investments' <dbl>, 'Liabilities' <dbl>, 'Long-Term
## # Debt' <dbl>, 'Long-Term Investments' <dbl>, 'Minority Interest' <dbl>,
## # 'Misc. Stocks' <dbl>, 'Net Borrowings' <dbl>, 'Net Cash Flow' <dbl>, 'Net
## # Cash Flow-Operating' <dbl>, 'Net Cash Flows-Financing' <dbl>, 'Net Cash
## # Flows-Investing' <dbl>, 'Net Income' <dbl>, 'Net Income Adjustments' <dbl>,
## # 'Net Income Applicable to Common Shareholders' <dbl>, 'Net Income-Cont.
## # Operations' <dbl>, 'Net Receivables' <dbl>, 'Non-Recurring Items' <dbl>,
## # 'Operating Income' <dbl>, 'Operating Margin' <dbl>, 'Other Assets' <dbl>,
## # 'Other Current Assets' <dbl>, 'Other Current Liabilities' <dbl>, 'Other
## # Equity' <dbl>, 'Other Financing Activities' <dbl>, 'Other Investing
## # Activities' <dbl>, 'Other Liabilities' <dbl>, 'Other Operating
## # Activities' <dbl>, 'Other Operating Items' <dbl>, 'Pre-Tax Margin' <dbl>,
## # 'Pre-Tax ROE' <dbl>, 'Profit Margin' <dbl>, 'Quick Ratio' <dbl>, 'Research
## # and Development' <dbl>, 'Retained Earnings' <dbl>, 'Sale and Purchase of
## # Stock' <dbl>, 'Sales, General and Admin.' <dbl>, 'Short-Term Debt / Current
## # Portion of Long-Term Debt' <dbl>, 'Short-Term Investments' <dbl>, 'Total
## # Assets' <dbl>, 'Total Current Assets' <dbl>, 'Total Current
## # Liabilities' <dbl>, 'Total Equity' <dbl>, 'Total Liabilities' <dbl>, 'Total
## # Liabilities & Equity' <dbl>, 'Total Revenue' <dbl>, 'Treasury Stock' <dbl>,
## # 'For Year' <dbl>, 'Earnings Per Share' <dbl>, 'Estimated Shares
## # Outstanding' <dbl>
```

```
dim(fundamental)
```

```
## [1] 1781 79
```

```
dim(prices)
```

```
## [1] 851264 7
```

```
summary(prices)
```

```
##           date                symbol           open
## Min.      :2010-01-04 00:00:00 Length:851264   Min.       : 0.85
## 1st Qu.:2011-10-19 00:00:00   Class :character 1st Qu.: 33.84
## Median :2013-08-02 00:00:00   Mode  :character Median : 52.77
## Mean      :2013-07-21 02:56:29                Mean      : 70.84
## 3rd Qu.:2015-04-24 00:00:00                3rd Qu.: 79.88
## Max.      :2016-12-30 00:00:00                Max.       :1584.44
##           close           low           high           volume
## Min.      : 0.86   Min.      : 0.83   Min.      : 0.88   Min.      : 0
## 1st Qu.: 33.85   1st Qu.: 33.48   1st Qu.: 34.19   1st Qu.: 1221500
## Median : 52.80   Median : 52.23   Median : 53.31   Median : 2476250
## Mean      : 70.86   Mean      : 70.12   Mean      : 71.54   Mean      : 5415113
## 3rd Qu.: 79.89   3rd Qu.: 79.11   3rd Qu.: 80.61   3rd Qu.: 5222500
## Max.      :1578.13   Max.      :1549.94   Max.      :1600.93   Max.      :859643400
```

```
head(prices, 5)
```

```
## # A tibble: 5 x 7
##   date                symbol open close  low  high volume
##   <dtm>                <chr> <dbl> <dbl> <dbl> <dbl>   <dbl>
## 1 2016-01-05 00:00:00 WLTW   123.  126.  122.  126.  2163600
## 2 2016-01-06 00:00:00 WLTW   125.  120.  120.  126.  2386400
## 3 2016-01-07 00:00:00 WLTW   116.  115.  115.  120.  2489500
## 4 2016-01-08 00:00:00 WLTW   115.  117.  114.  117.  2006300
## 5 2016-01-11 00:00:00 WLTW   117.  115.  114.  117.  1408600
```

Here we have the main datasets I plan to use in the project. We see the dimensions of the dataset as well as the rows and the columns. Important columns to note are the Income, Revenue and Investments.

Section 4: References: <https://www.kaggle.com/dgawlik/nyse?select=fundamentals.csv> - dataset