Dec 6, 2023 - v1

'Retirement Accumulation' Scenario:
Portfolio: Stocks Portfolio
Duration: 30 years
Inflation Rate: 3.5%
Annual Rebalancing: Yes

Stocks Portfolio Start:

Position	Allocation	Value
Domestic Equities	70.0%	$0.00
International Equities	30.0%	$0.00
Total	100.0%	$0.00

Stocks Portfolio End (Inflation Corrected at 3.5%):

Position	Allocation	Value
Domestic Equities	35.0%	$290,828.12
International Equities	15.0%	$124,640.62
Domestic Fixed Income	35.0%	$290,828.12
International Fixed Income	15.0%	$124,640.62
Total	100.0%	$830,937.49

Raw Metrics:
Ave Return: 9.4%
Best Return: 32.4% (year 9)
Worst Return: -7.4% (year 5)

Inflation Corrected Metrics at 3.5%:
Ave Return: 5.7%
Best Return: 28.0% (year 9)
Worst Return: -10.5% (year 5)

Monte Carlo Results for the 'Retirement Accumulation' Scenario:

Number of Runs: 400
High-end Outliers Removed: 0

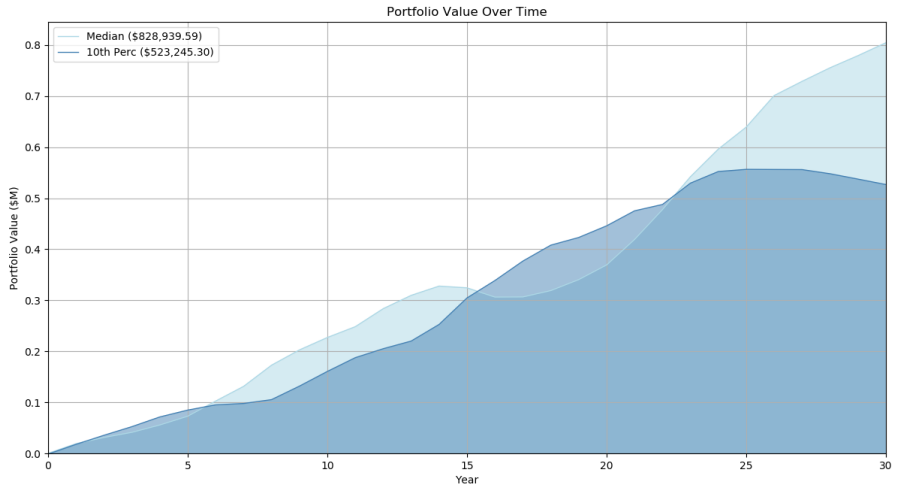
Inflation Corrected Portfolio Final Values:
  Average: $920,472.66
  Std Dev: $365,641.08

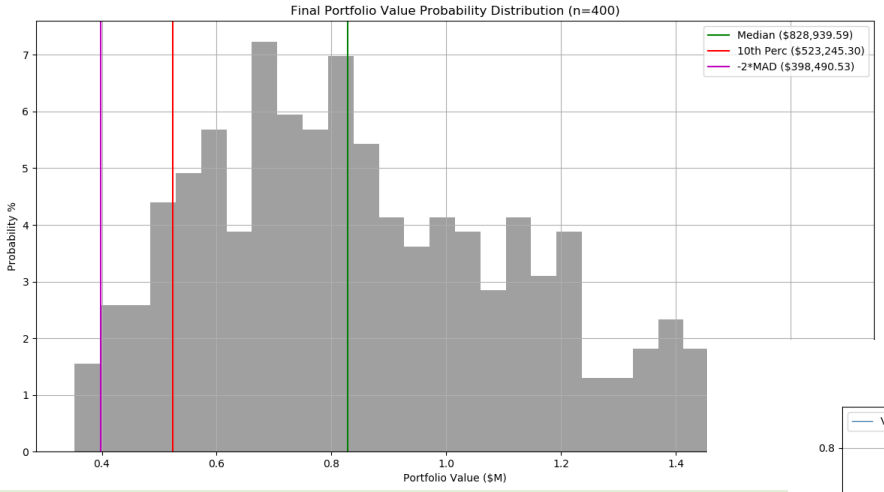
  Median: $839,135.35
  MAD: $225,292.12

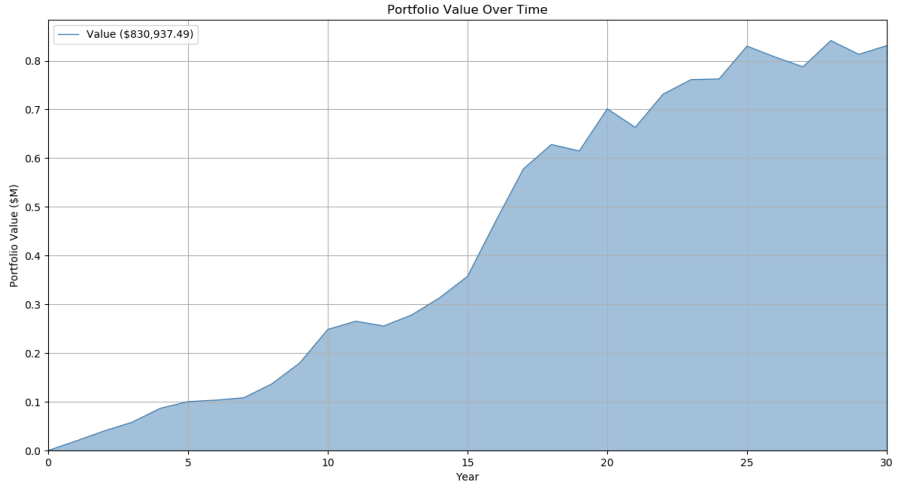
  Minimum: $351,865.10
  10th Perc: $523,672.64
  Median: $839,135.35
  90th Perc: $1,406,745.31
  Maximum: $2,735,078.43

Savings Goal: $1,000,000.00
Likelihood of Meeting Goal: 34.5%

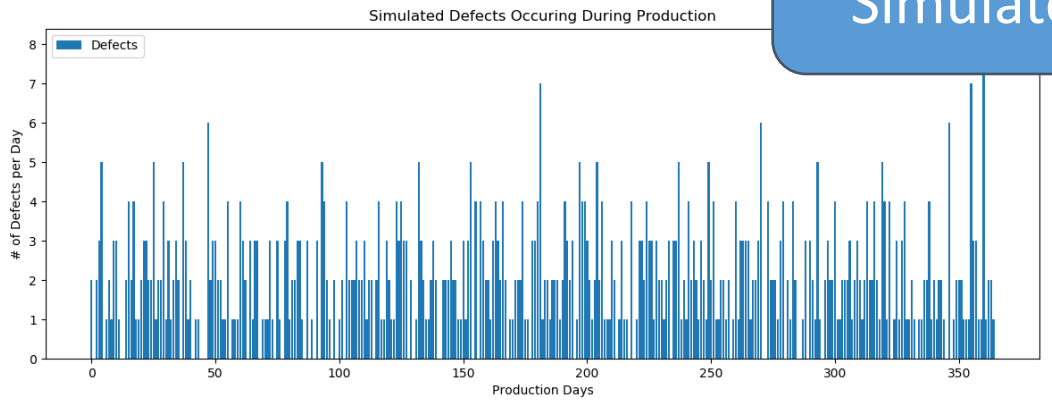
Financial Statistical Analysis

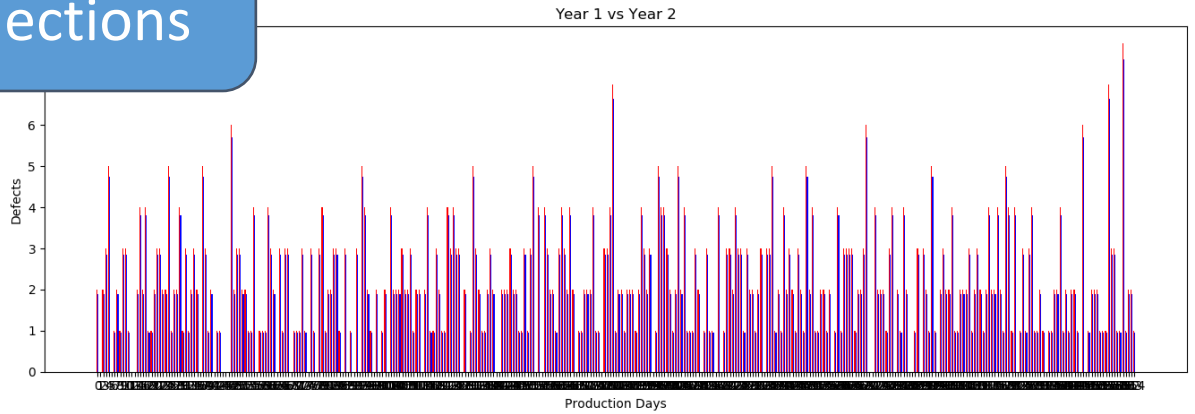


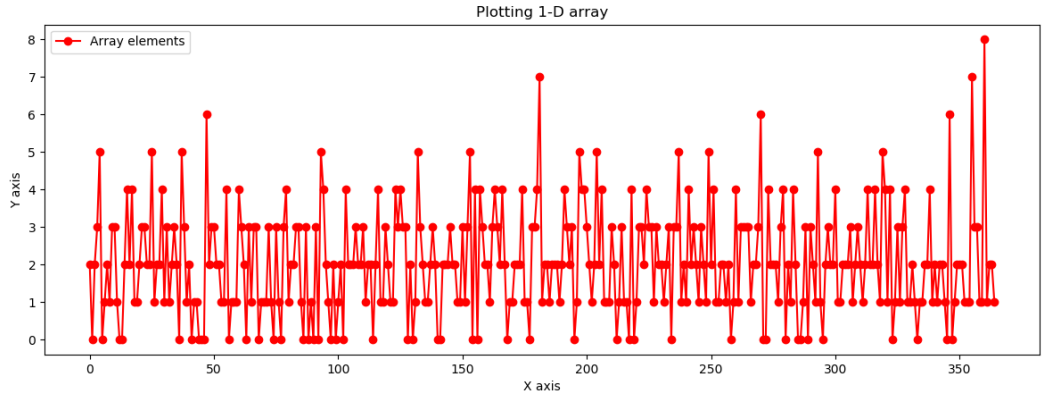


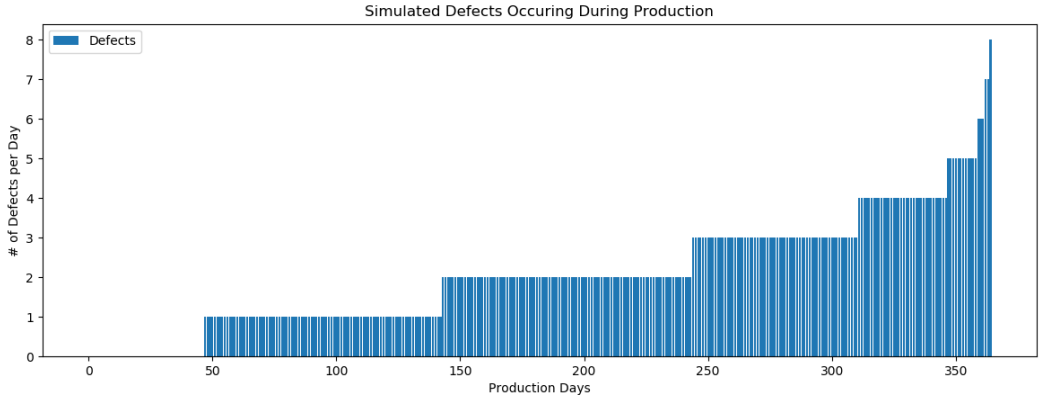


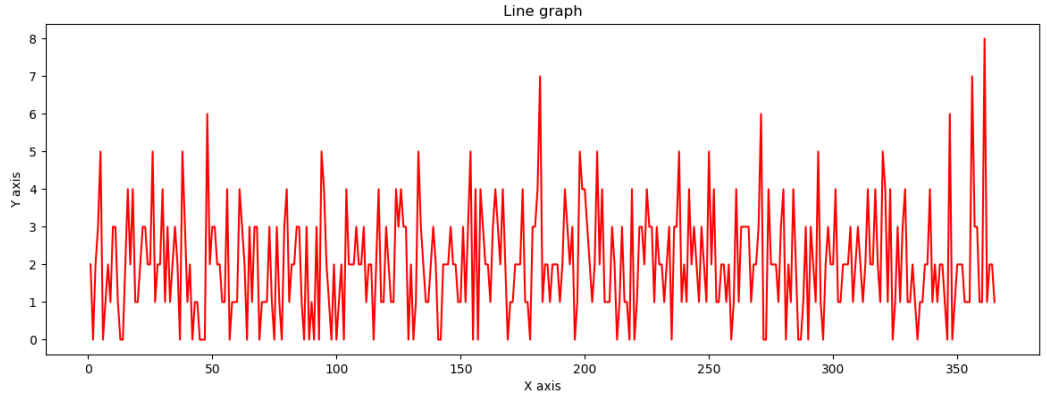
Manufacturing Defect Simulated Projections

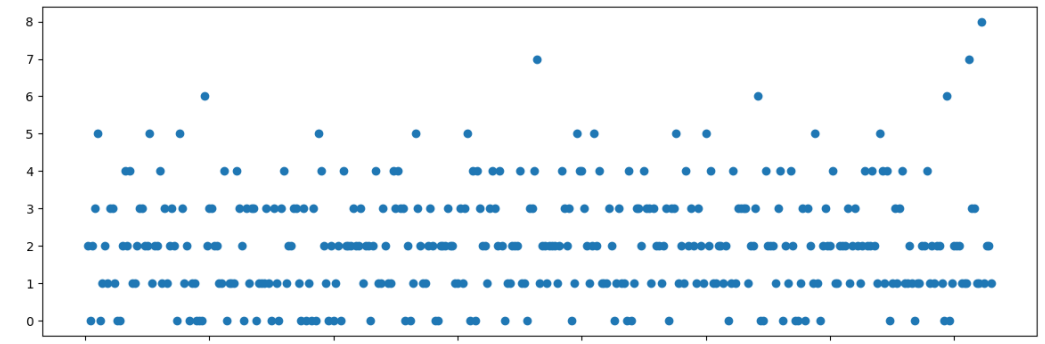




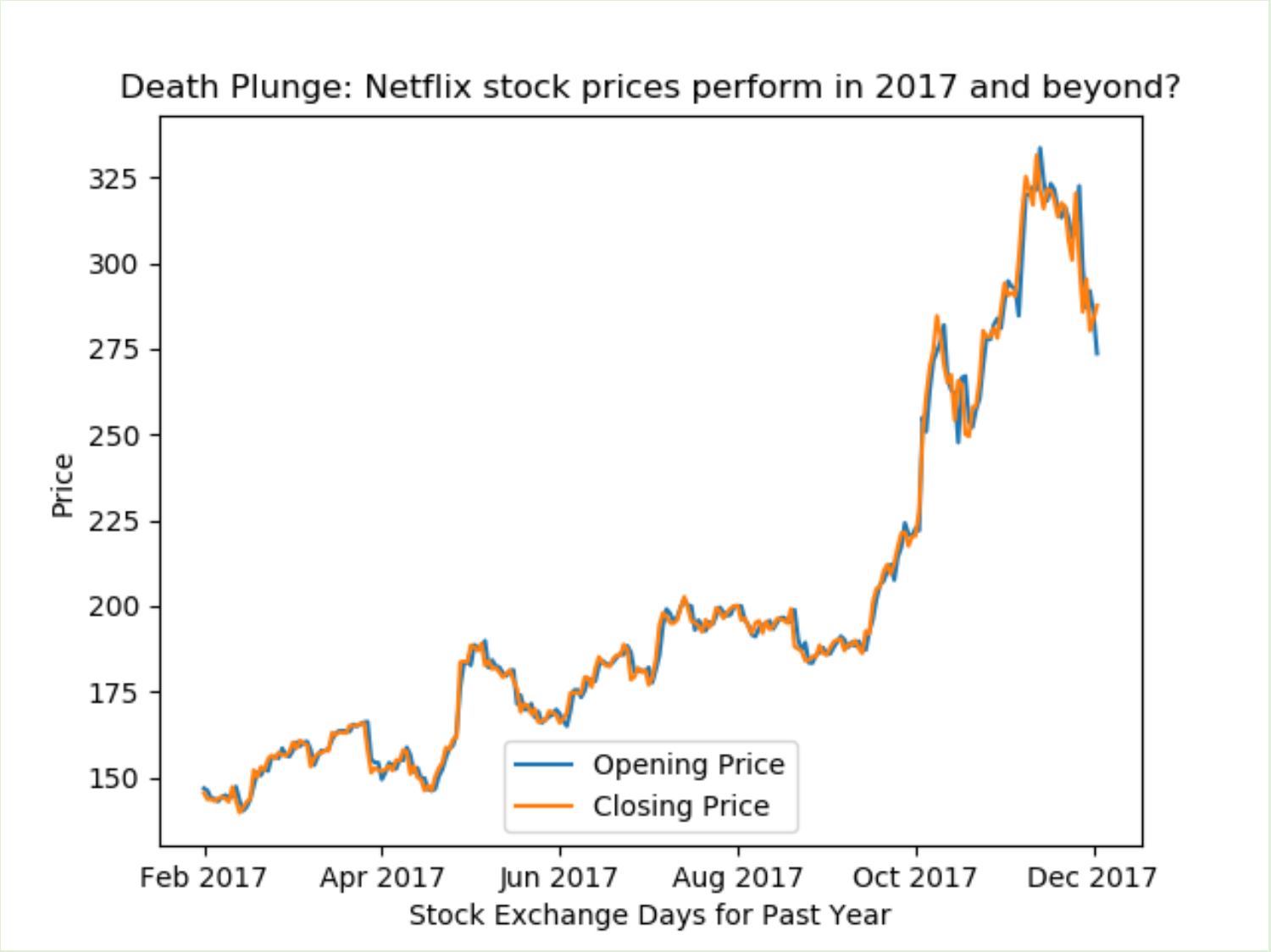




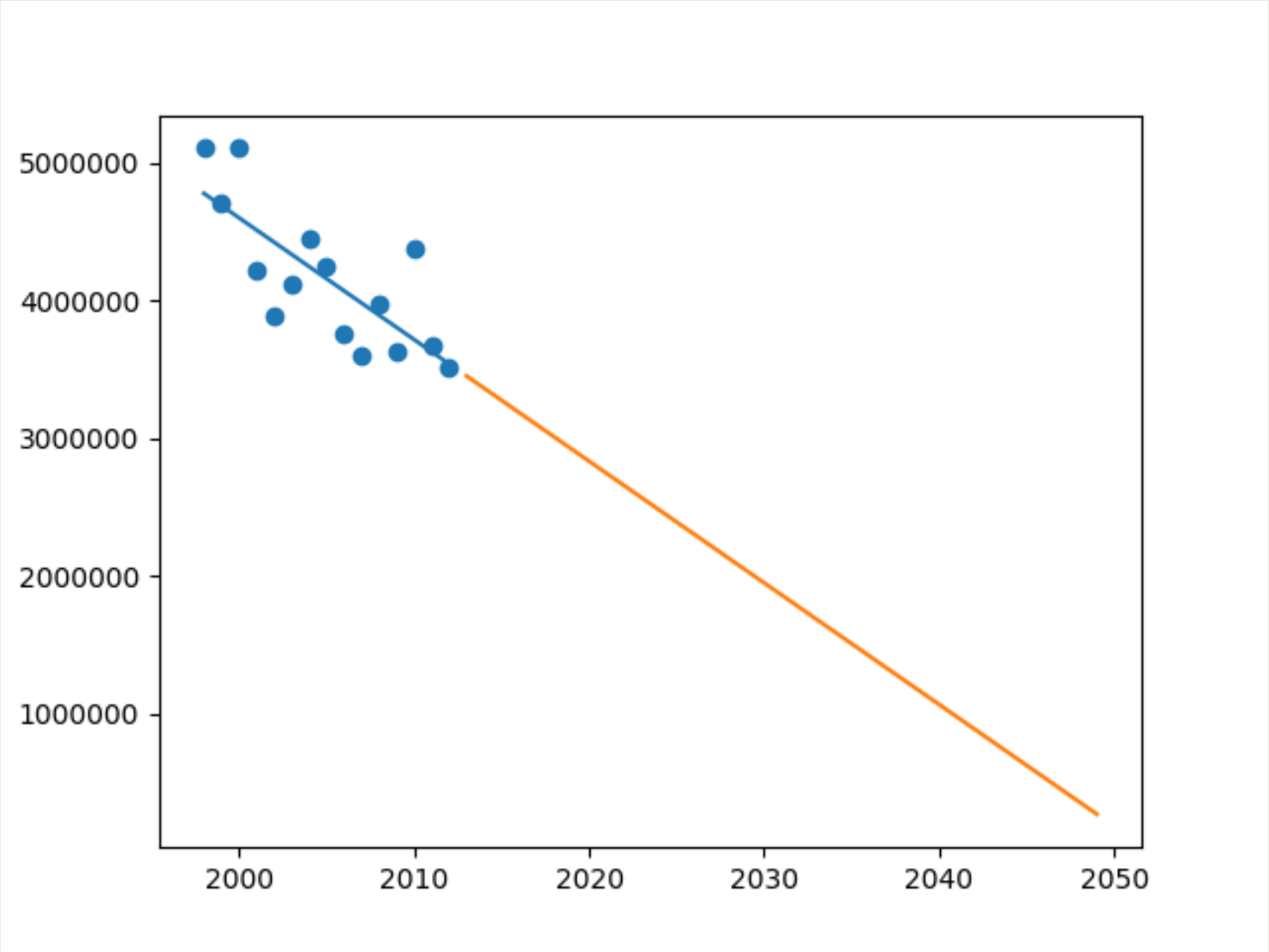




Automated Creation of Stock Charts



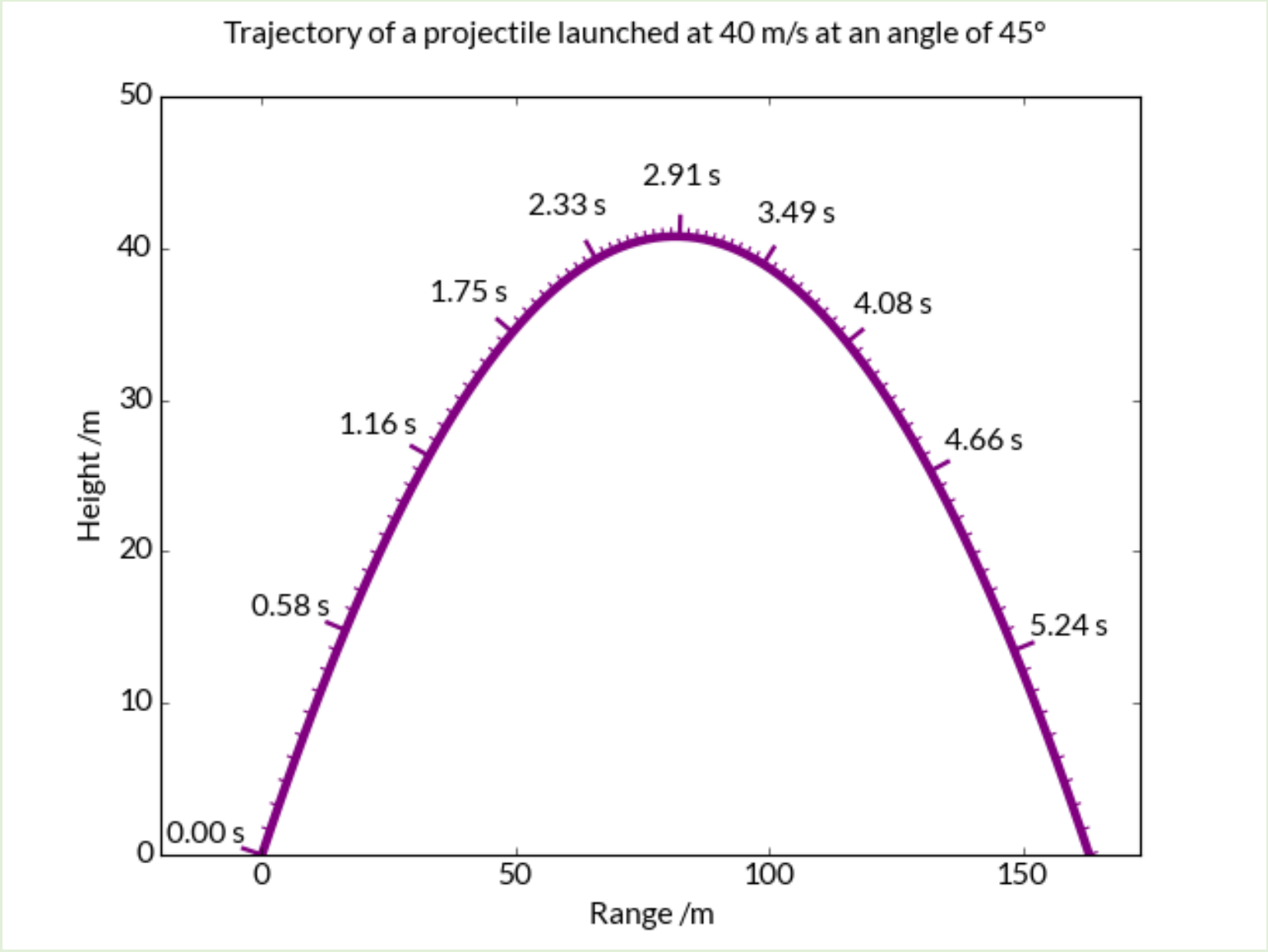
Linear Progression of Honey Production



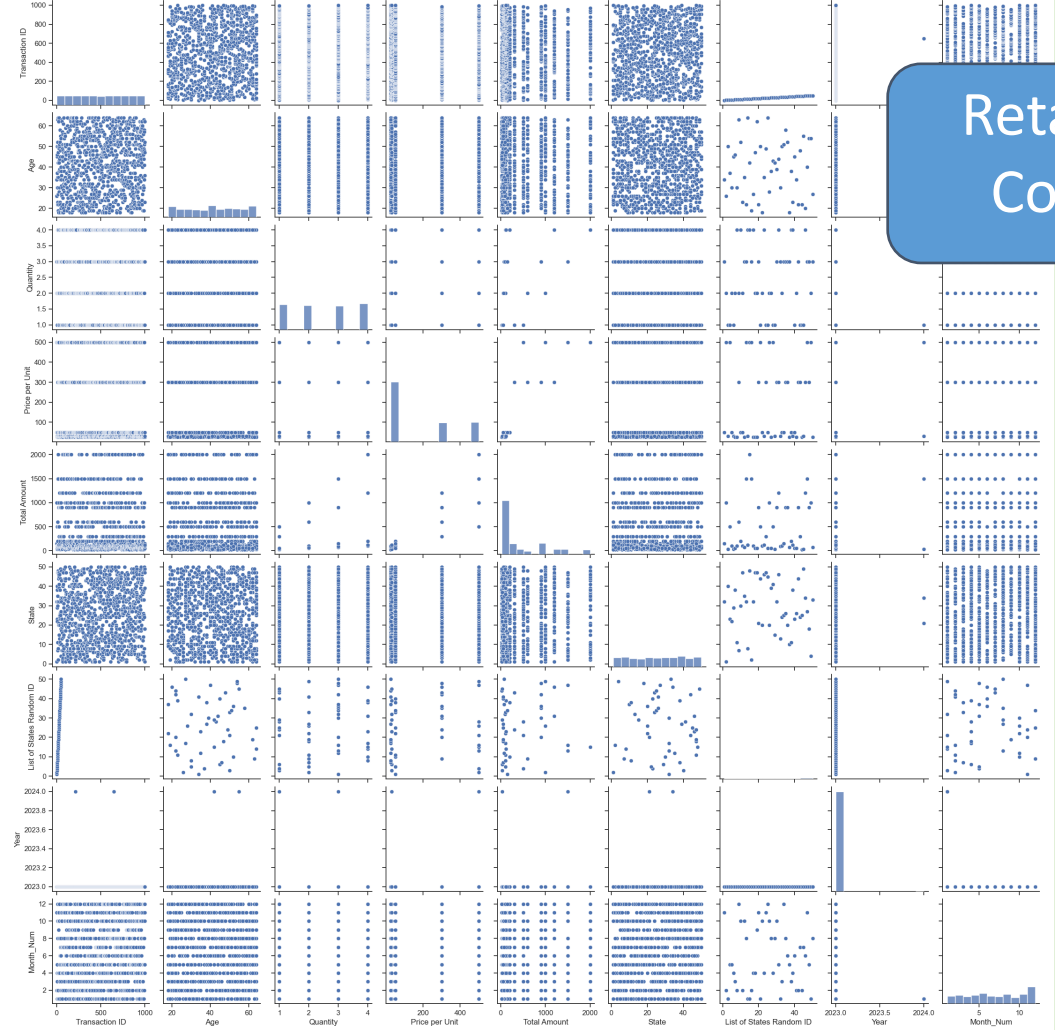
Statistical Tools and Example Usage Cases

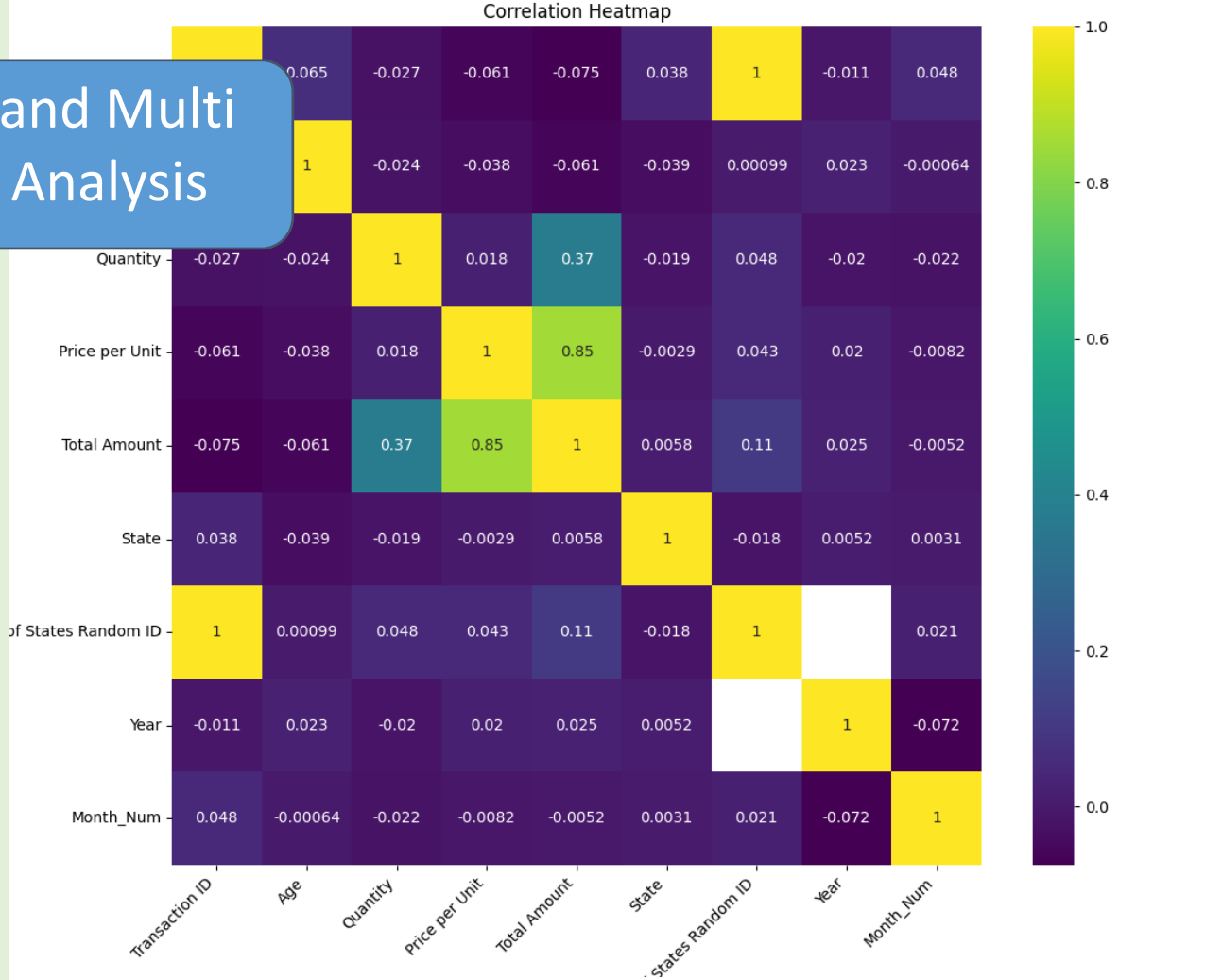
```
import scipy.stats as stats
import numpy as np

##########
labels=1
##########

## Exercise 1
# sampling from a 6-sided die
die_6 = range(1, 7)
print(np.random.choice(die_6, size = 5, replace = True))


## Exercise 4 - binomial probability mass function
# 6 heads from 10 fair coin flips
print(stats.binom.pmf(6, 10, 0.5))
```

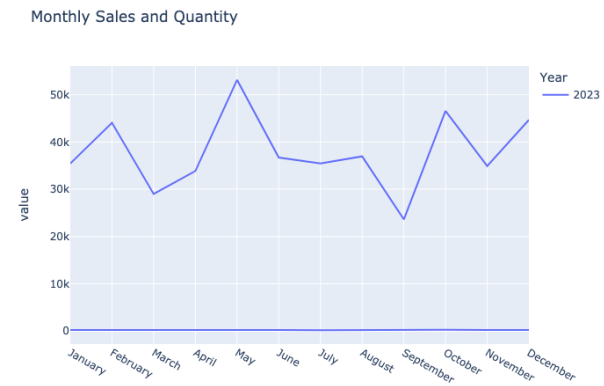
Physics Trajectory Calculator and Graph



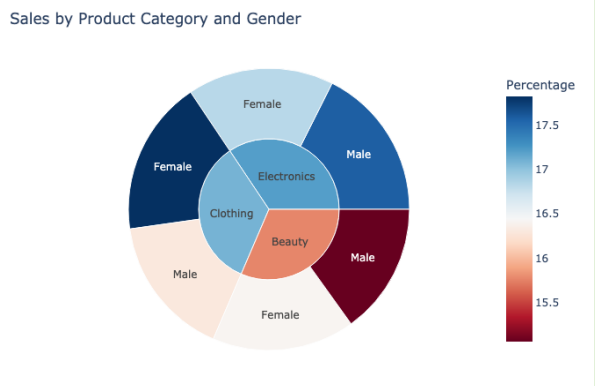
Retail Trend and Multi Correlation Analysis

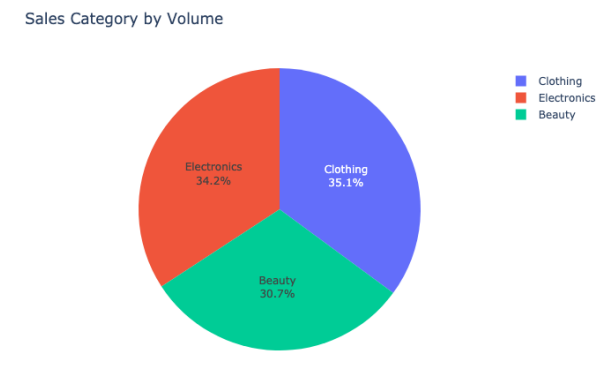






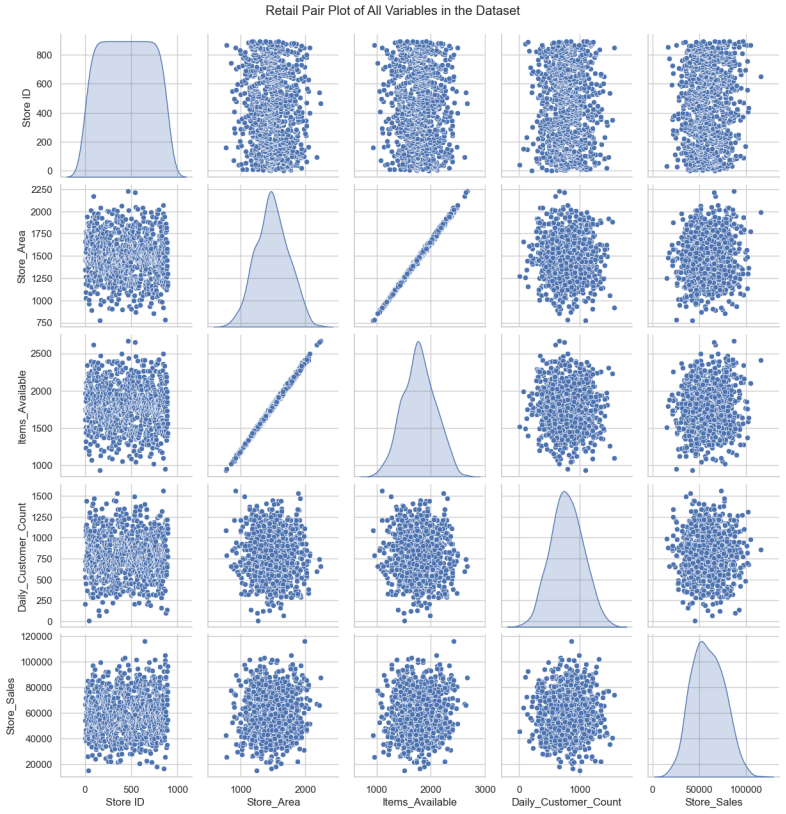






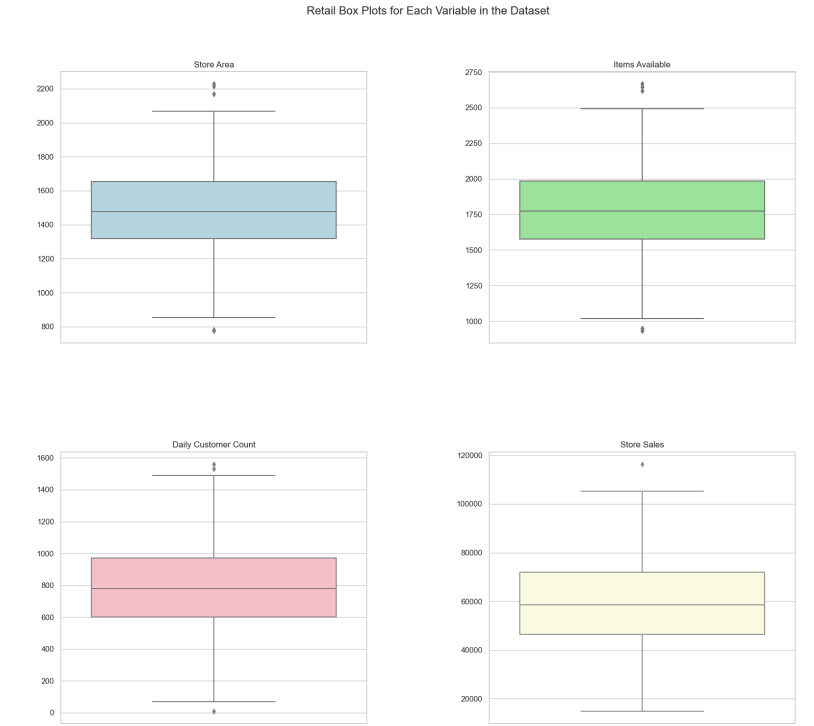
Retail Sales Variable Correlation Analysis











IPFS Content and Interactive HTML

Random Planet Facts

A year on Jupiter lasts around 4333 earth days.

Click for Fun Facts

Understand the world around you a little bit more...

Basic 4 Function Calculators

► See More

Percent to Decimal Conversion

► See More

Simple Interest Calculators

► See More

Click for Calculators

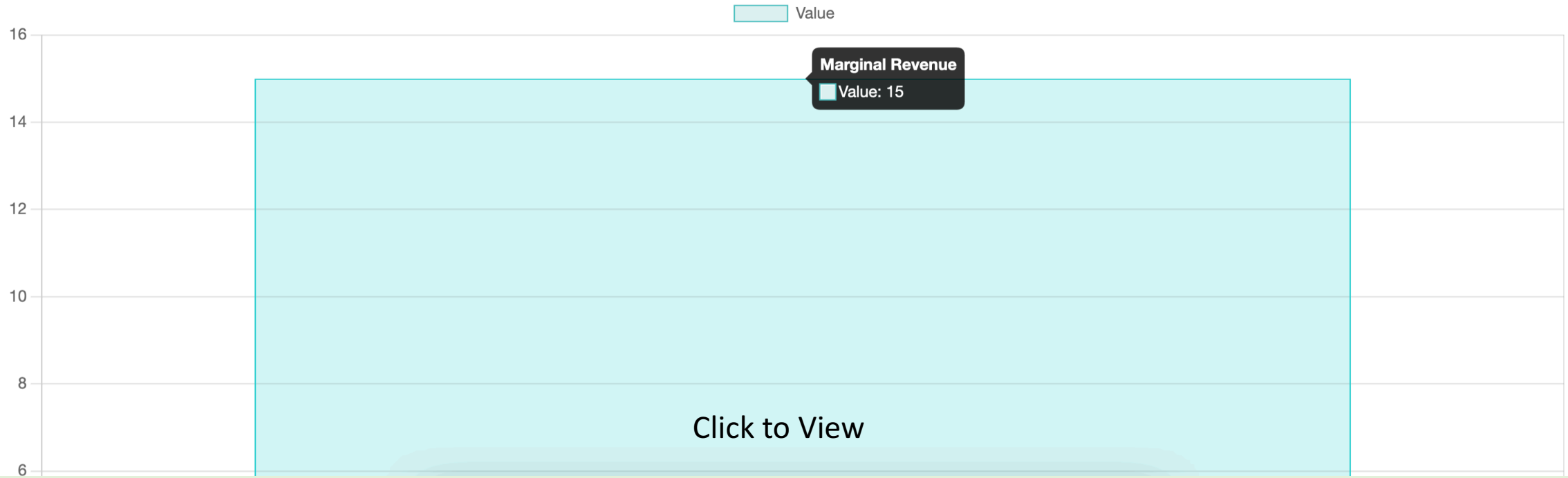
Economics HTML and JS Concept Visualization

Homework Helper

Choose a formula: Marginal Revenue

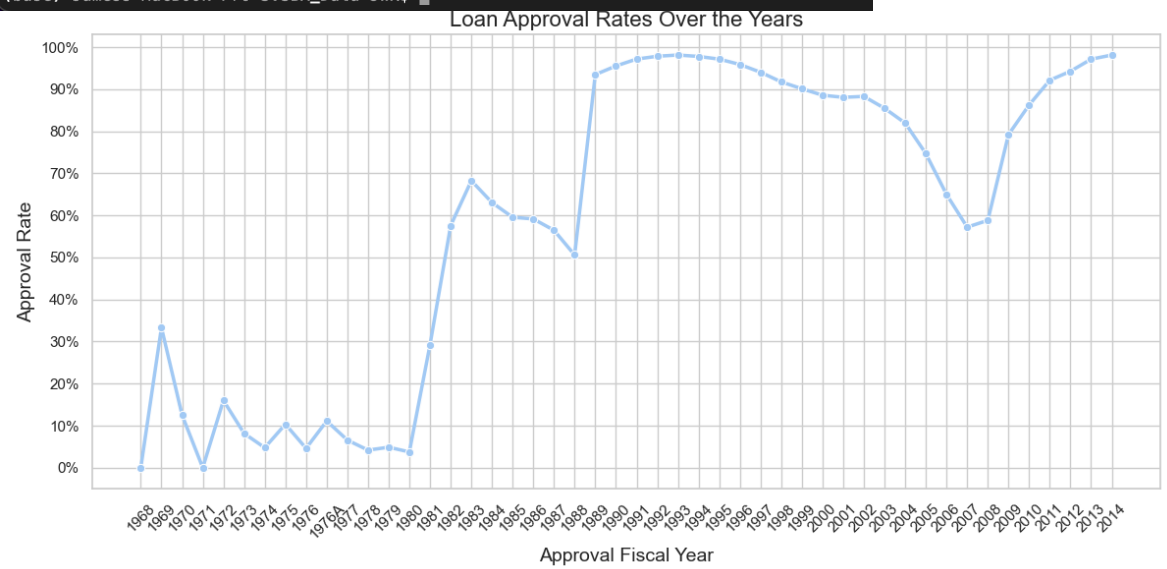
Change in Total Revenue: 75

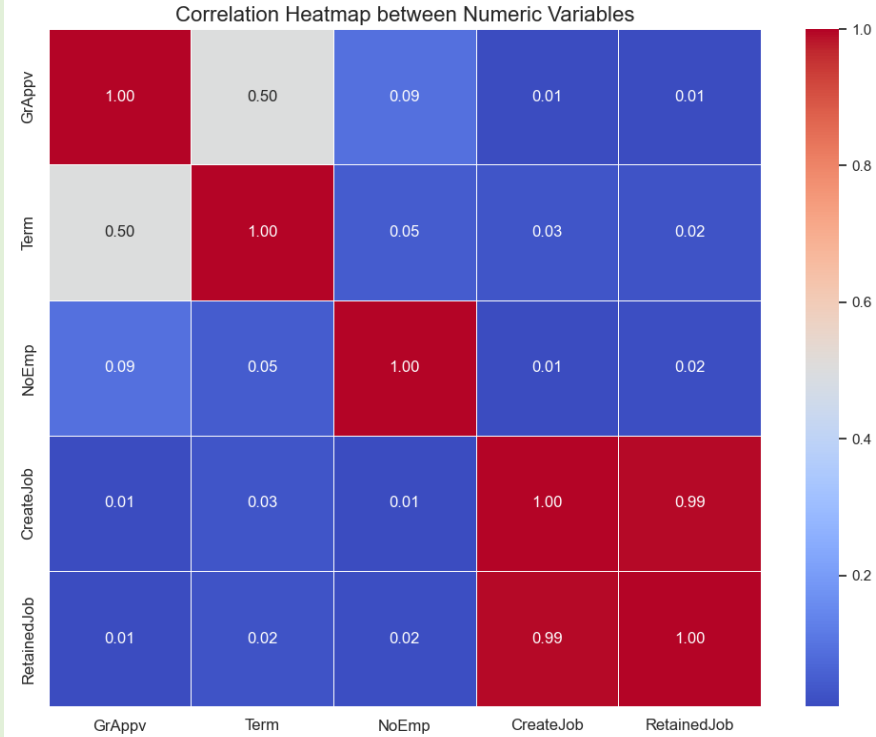
Change in Quantity: 5

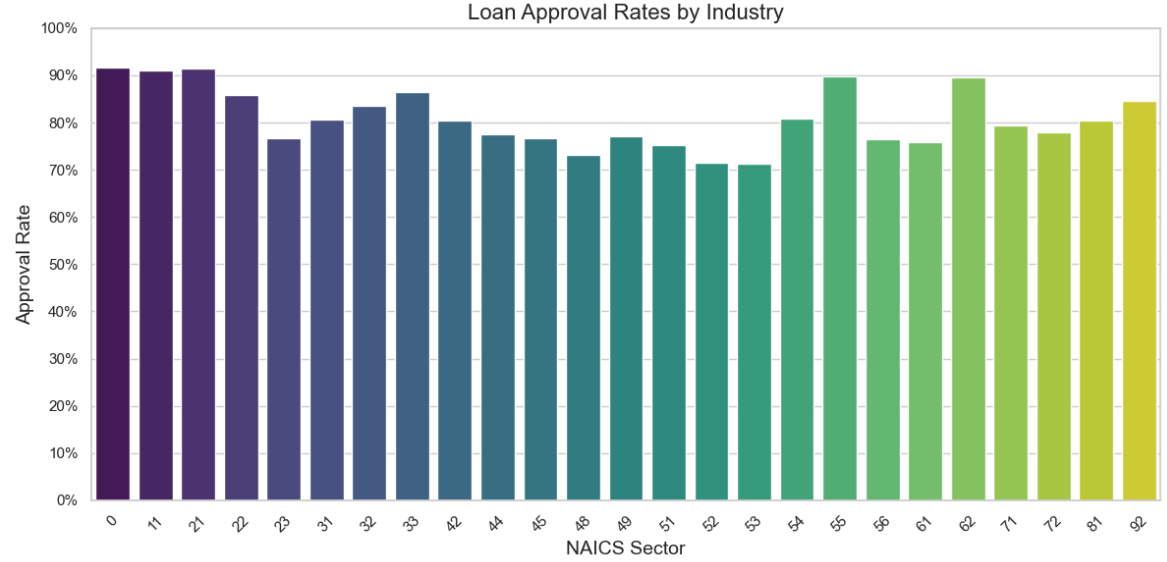


```
(base) Jamess-MacBook-Pro-3:SBA_Data JWK$ python Data_Analysis_2
Loading the data...
Cleaning the data...
Creating Visualization 1: Loan Approval Rates Over the Years...
Visualization 1 saved.
Creating Visualization 2: Loan Approval Rates Across Different Loan Amounts...
Visualization 2 saved.
Creating Visualization 3: Loan Approval Rates by Industry...
Visualization 3 saved.
Creating Visualization 4: Correlation Heatmap between Numeric Variables...
Visualization 4 saved.
All visualizations have been created and saved in the 'loan_analysis_images' directory.
(base) Jamess-MacBook-Pro-3:SBA_Data JWK$
```

SBA Loan Approval Analysis



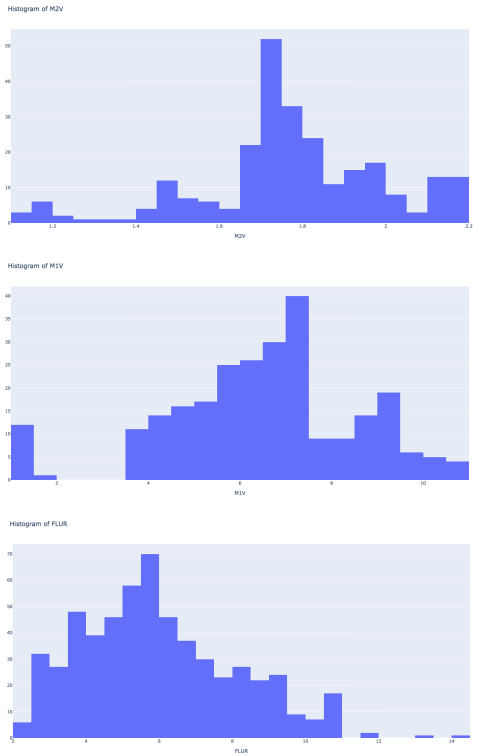


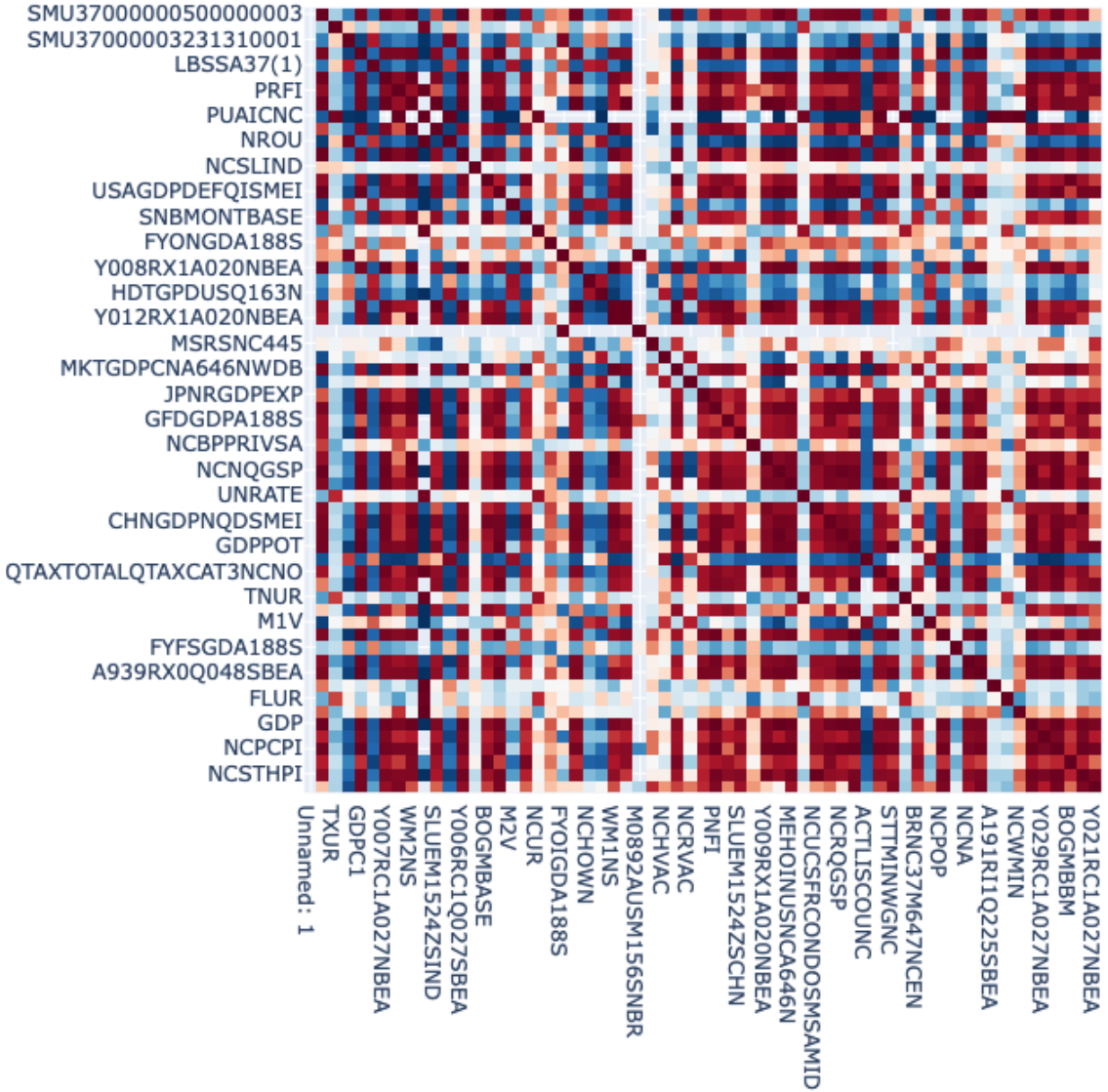




Federal Reserve Bank of St. Louis – FRED Analysis

Correlation Matrix







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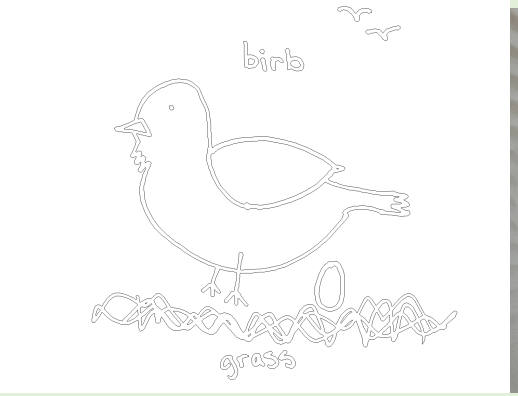



1.Insert High Contrast Image (sharpie on paper)
2.Red Outline, Black Inside Lines, Save DXF
3.View DXF line drawing as a PNG (no DXF viewer necessary)
4.Verify DXF Overlaid onto Original Image

