Profit Prediction

Shameena M K

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Introduction

- To prepare an ML model which can predict the profit value of a company.
- Models used:
  - ❑ LinearRegression
  - ❑ RandomForestRegressor
  - ❑ KNeighborsRegressor

Dataset looks like..

| R&D Spend	Administra	Marketing	Profit
165349.2	136897.8	471784.1	192261.8
162597.7	151377.6	443898.5	191792.1
153441.5	101145.6	407934.5	191050.4
144372.4	118671.9	383199.6	182902
142107.3	91391.77	366168.4	166187.9
131876.9	99814.71	362861.4	156991.1
134615.5	147198.9	127716.8	156122.5
130298.1	145530.1	323876.7	155752.6
120542.5	148719	311613.3	152211.8
123334.9	108679.2	304981.6	149760
101913.1	110594.1	229161	146122
100672	91790.61	249744.6	144259.4
93863.75	127320.4	249839.4	141585.5
91992.39	135495.1	252664.9	134307.4
119943.2	156547.4	256512.9	132602.7
114523.6	122616.8	261776.2	129917
78013.11	121597.6	264346.1	126992.9
94657.16	145077.6	282574.3	125370.4
91749.16	114175.8	294919.6	124266.9
86419.7	153514.1	0	122776.9
76253.86	113867.3	298664.5	118474
78389.47	153773.4	299737.3	111313
73994.56	122782.8	303319.3	110352.3
67532.53	105751	304768.7	108734
77044.01	99281.34	140574.8	108552

Tools used for Analysing Data..

- Excel sheets

- Ipython (jupyter Notebook)

- Libraries on Ipython to perform various task to process Machine learning algorithms

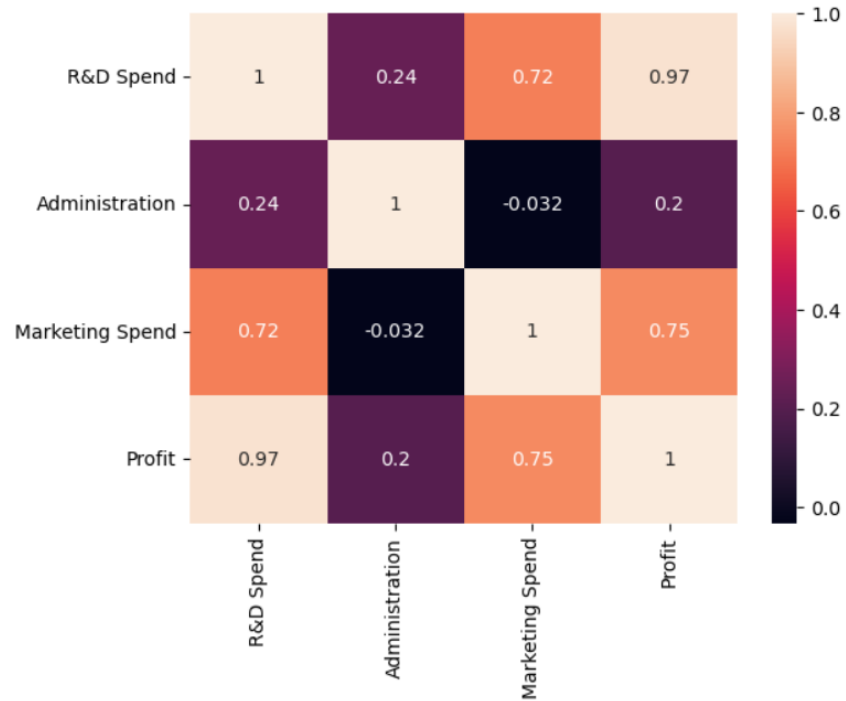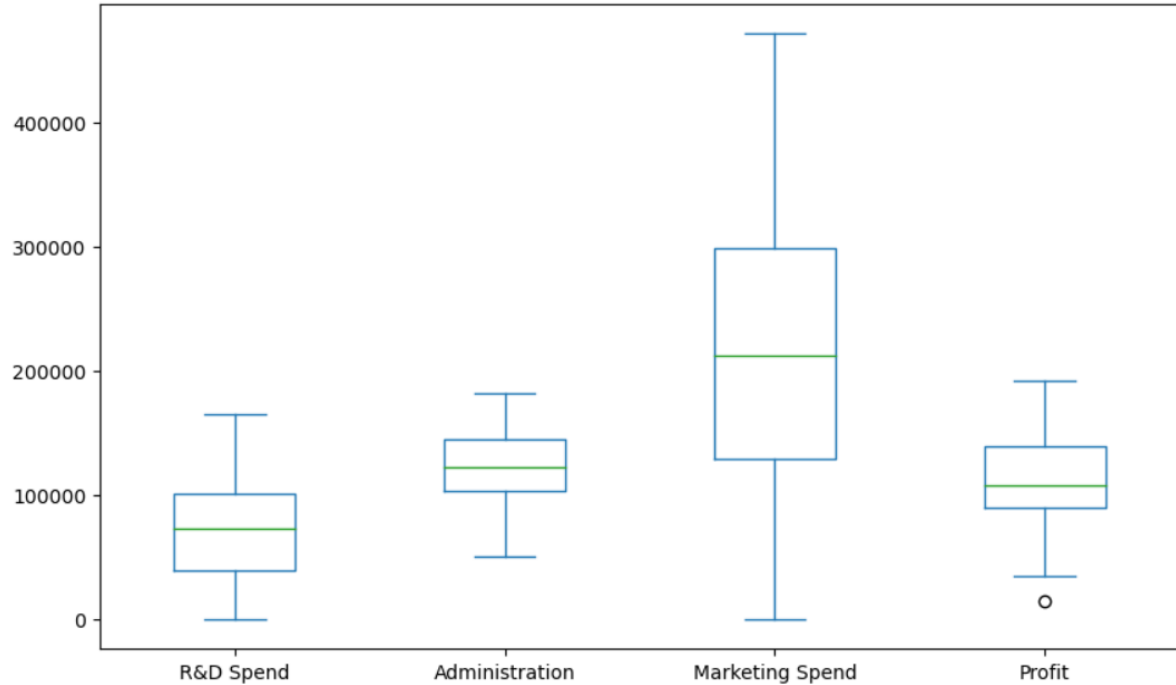- Tableau for better visualisation of Big Data
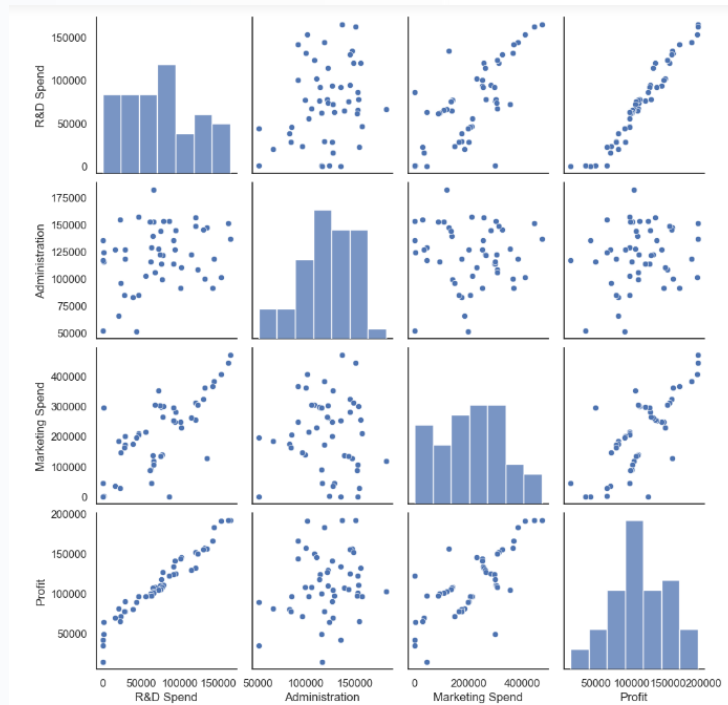
Exploratory Data Analysis

Bar graph
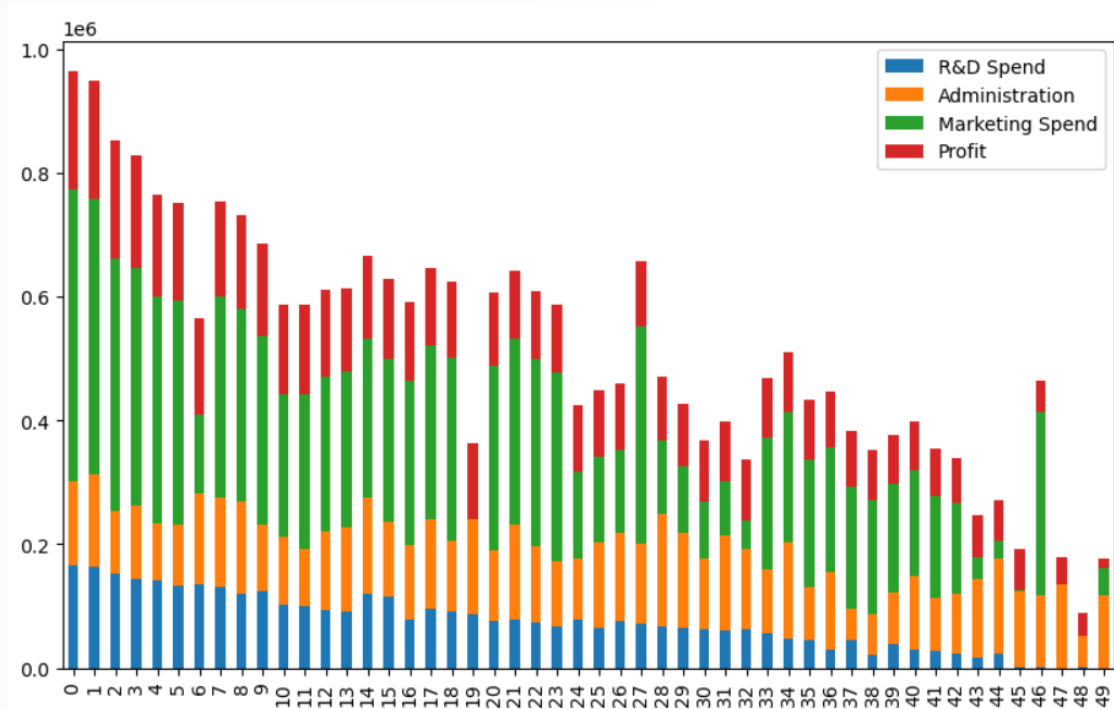
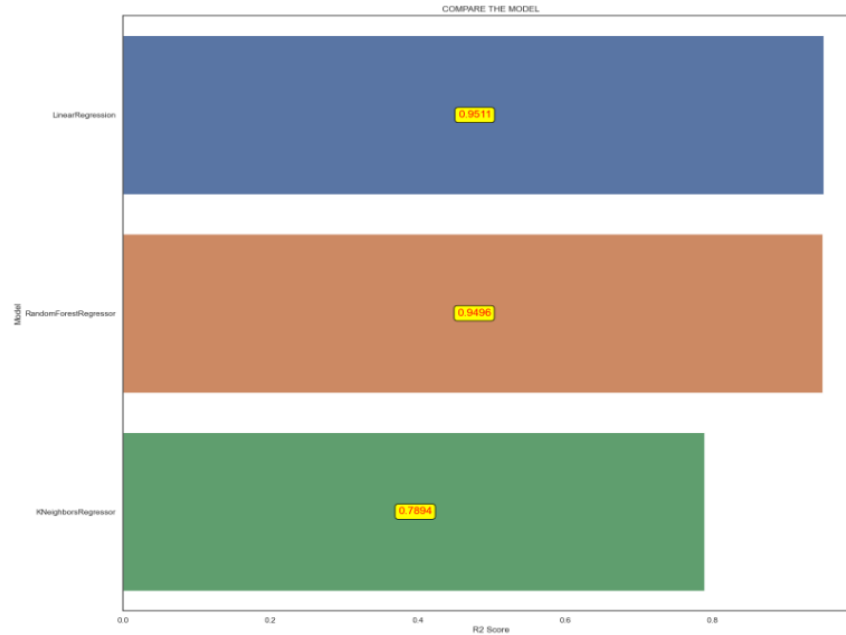# Correlation Heatmap

Handling Outliers using Boxplot

Pair plot

Profit Prediction
Representation of model comparison.

Conclusion

- From the result of the model
  - Best model is Linear Regression
  - Worst model is KNeighborsRegressor

THANK YOU