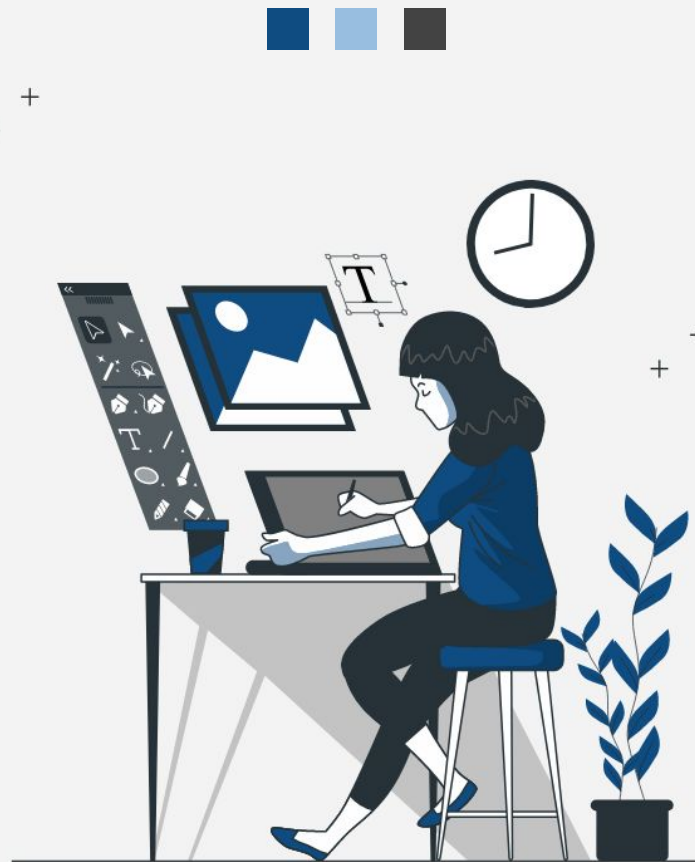


Banruptcy Prediction

A RESEARCH PAPER

SHUBHAM KALE J026
YASH MUDALIYAR J037
SHANTANU JOSHI J0__



CONTENTS OF THE PAPER

Here's what you'll find

- An Introduction
- Dataset Explanation
- Methodology/ Algorithms used
 - SVM
 - Random Forest Classifier
 - Logistic Regression
 - K- Nearest Neighbour
- Conclusion and Future Scope
- References

01. ABOUT THE PROJECT

Finding the best route for
Bankruptcy Prediction

02. MAJOR REQUIREMENTS

Basic understanding of the
functioning models

03. SNEAK PEEK

Delving into Statistical
Modelling and Artificial
Intelligence

04 . PROJECT Goals

You could describe the topic
of the section here

OUR Dataset



6,819

Observations recorded



96

Attributes

|

Type: Integer



64

Financial ratios incorporated into each observation



N.A.

Missing Null Values

Date Donated 2020-06-28

Adopted Methodology

SVM

Support Vector Machine

+

Logistic Regression

Used to define relationship with a dependent variable



Random Forest Classifier

A large number of individual decision trees that operate as a unit.

KNN

K- Nearest Neighbour

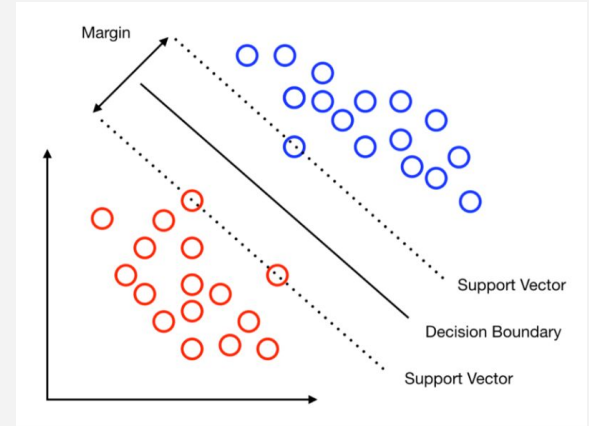
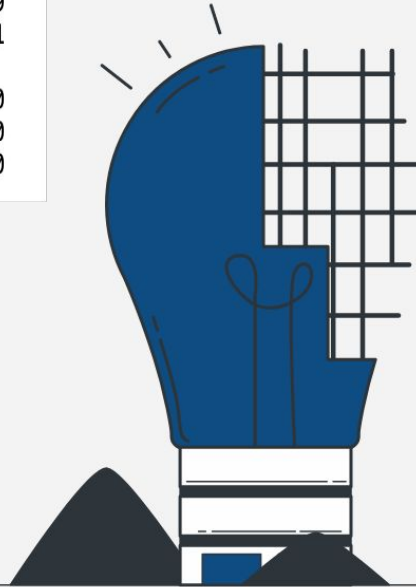
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+

SVM

Train score: 0.9015912104565259

Accuracy score: 0.8965909090909091

	precision	recall	f1-score	support
0	0.90	0.88	0.89	1269
1	0.89	0.91	0.90	1371
accuracy			0.90	2640
macro avg	0.90	0.90	0.90	2640
weighted avg	0.90	0.90	0.90	2640

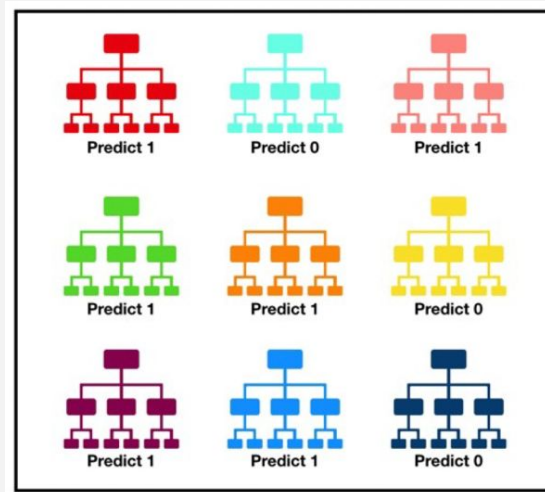
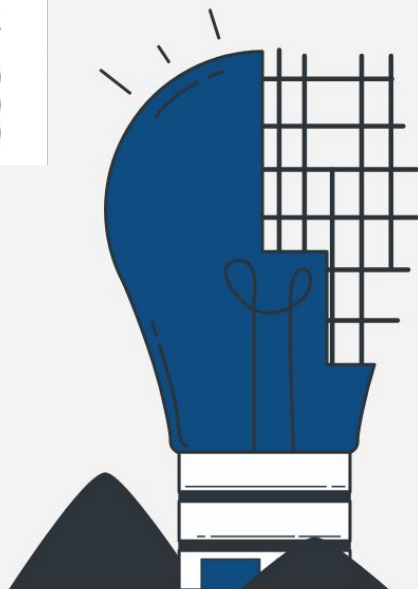


Random Forest Classifier

Train score: 1.0

Accuracy score: 0.981439393939394

	precision	recall	f1-score	support
0	1.00	0.97	0.98	1269
1	0.97	1.00	0.98	1371
accuracy			0.98	2640
macro avg	0.98	0.98	0.98	2640
weighted avg	0.98	0.98	0.98	2640

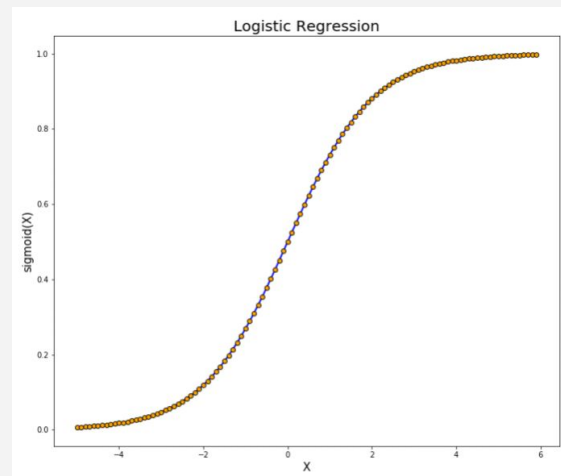
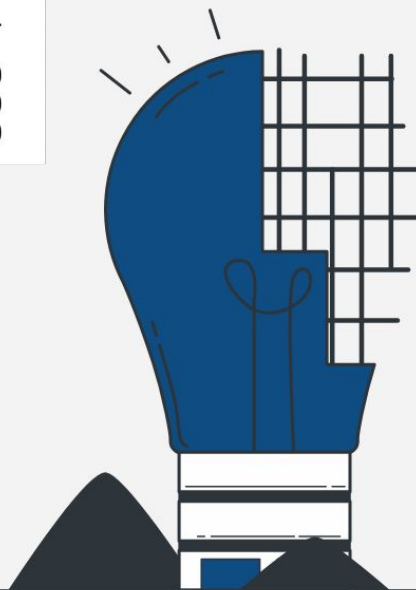


Logistic Regression

Train score: 0.8925932941845046

Accuracy score: 0.8882575757575758

	precision	recall	f1-score	support
0	0.89	0.88	0.88	1269
1	0.89	0.90	0.89	1371
accuracy			0.89	2640
macro avg	0.89	0.89	0.89	2640
weighted avg	0.89	0.89	0.89	2640

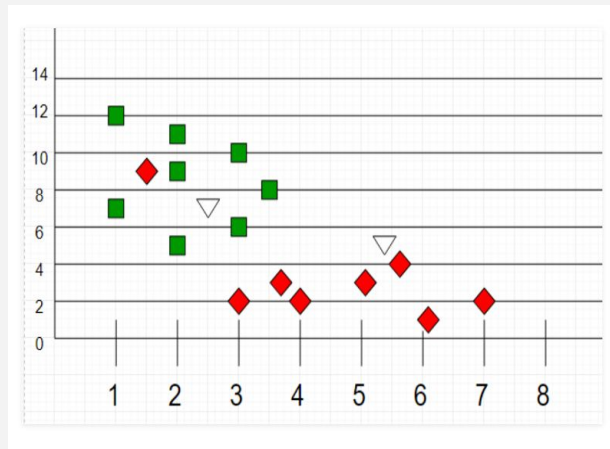
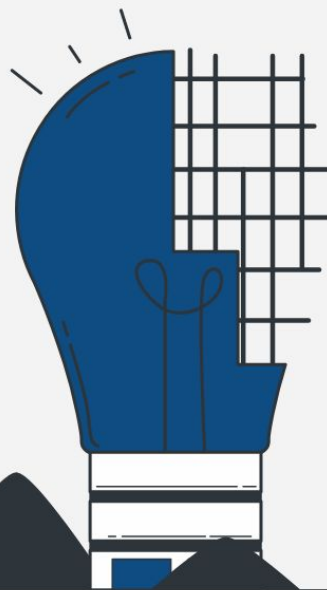


K- Nearest Neighbour

Train score: 0.978215571130896

Accuracy score: 0.9579545454545455

	precision	recall	f1-score	support
0	1.00	0.91	0.95	1269
1	0.93	1.00	0.96	1371
accuracy			0.96	2640
macro avg	0.96	0.96	0.96	2640
weighted avg	0.96	0.96	0.96	2640



Conclusion & FUTURE Prospects



THANKS!

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Until next time....



-A Presentation by Yash