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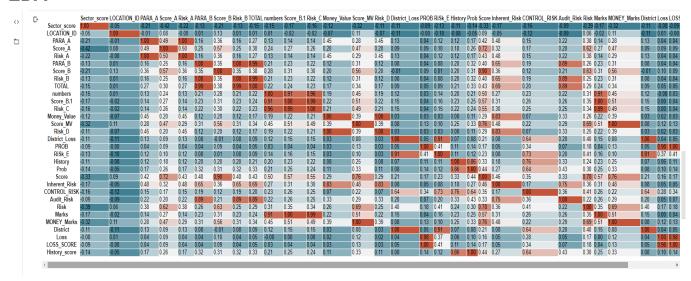
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CSE 445

Sec:3

Course Instructor : ITN Assignment Report

EDA



	Risk_/	A Risk_E	Risk_C	Risk_D	RiSk_E	Prob	Score	CONTROL_RISK	Audit_Risk	Risk	MONEY_Marks	Loss
Risk_A	1.00	0.16	0.14	0.45	0.12	0.17	0.43	0.15	0.22	0.38	0.29	0.04
Risk_B	0.16	1.00	0.22	0.12	0.08	0.32	0.40	0.19	0.89	0.25	0.31	0.04
Risk_C	0.14	0.22	1.00	0.21	0.15	0.24	0.55	0.25	0.25	0.34	0.49	0.00
Risk_D	0.45	0.12	0.21	1.00	0.03	0.11	0.29	0.07	0.33	0.25	0.39	0.02
RiSk_E	0.12	0.08	0.15	0.03	1.00	0.12	0.23	0.73	0.20	0.41	0.10	0.37
Prob	0.17	0.32	0.24	0.11	0.12	1.00	0.44	0.64	0.43	0.30	0.33	0.10
Score	0.43	0.40	0.55	0.29	0.23	0.44	1.00	0.35	0.33	0.78	0.76	0.16
CONTROL_RISK	0.15	0.19	0.25	0.07	0.73	0.64	0.35	1.00	0.36	0.41	0.22	0.28
Audit_Risk	0.22	0.89	0.25	0.33	0.20	0.43	0.33	0.36	1.00	0.22	0.29	0.05
Risk	0.38	0.25	0.34	0.25	0.41	0.30	0.78	0.41	0.22	1.00	0.69	0.17
MONEY_Marks	0.29	0.31	0.49	0.39	0.10	0.33	0.76	0.22	0.29	0.69	1.00	0.12
Loss	0.04	0.04	0.00	0.02	0.37	0.10	0.16	0.28	0.05	0.17	0.12	1.00

This is the correlation matrix.

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Classifiers Used:

Soft Voting Classifier: In **soft voting**, predictions are chosen by summing the prediction probabilities from the individual models and choosing the prediction with the largest sum. In **soft voting**, every individual classifier provides a probability value that a specific data point belongs to a particular target class. The predictions are weighted by the classifier's importance and summed up. Then the target label with the greatest sum of weighted probabilities wins the vote.

Hard Voting Classifier: In **hard voting** (also known as **majority voting**), every individual classifier votes for a class, and the majority wins. In statistical terms, the predicted target label of the ensemble is the mode of the distribution of individually predicted labels.

Tables:

Hard Voting

	Accuracy
KNeighborsClassifier	0.9473684210526315
SVC	0.9526315789473684
LogisticRegression	0.9578947368421052
VotingClassifier	0.9526315789473684

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Soft Voting

	Accuracy
KNeighborsClassifier	0.9526315789473684
SVC	0.9578947368421052
LogisticRegression	0.9473684210526315
VotingClassifier	0.9578947368421052

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