Report on Assignment4.2: Decision Stump and Adaptive Boosting

CSE 472: Machine Learning Sessional

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Comparison of Normal ID3, Decision Stump, Adaptive Boosting

Result on test data for *Normal ID3*:

Accuracy	Precision	Recall	F1-Score
0.996	0.992	0.996	0.994

Result on test data for *Decision Stump*:

Accuracy	Precision	Recall	F1-Score
0.888	0.902	0.771	0.831

Result on test data for *Adaptive Boosting* with *Round=30*:

Accuracy	Precision	Recall	F1-Score
0.956	0.977	0.967	0.960

Comparison with Differnent Rounds for Adaptive Boosting

Result on test data for *Round=5*:

Accuracy	Precision	Recall	F1-Score
0.955	0.958	0.920	0.939

Result on test data for *Round=10*:

Accuracy	Precision	Recall	F1-Score
0.970	0.943	0.980	0.962

Result on test data for *Round=20*:

Accuracy	Precision	Recall	F1-Score
0.978	0.957	0.978	0.967

Result on test data for *Round=30*:

Accuracy	Precision	Recall	F1-Score
0.956	0.977	0.967	0.960