Diabetes classification using SVM and Dimensionality Reduction

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Aim:
To predict the presence of Diabetes using SVM and apply dimensionality reduction using PCA.

Pima Indians Diabetes Data Set :
https://www.kaggle.com/uciml/pima-indians-diabetes-database
Pima Indians Diabetes Dataset

Variation Table :

S. No	Train split	Test spilt	Algorithm	Preprocessing	dimensionality reduction	No. of features	Accuracy
1	75	25	KBF	Std scalar	None	8	0.77604
2	75	25	KBF	Std scalar	PCA	3	0.765625
3	75	25	KBF	Std scalar	PCA	2	0.760416
4	75	25	KBF	None	None	8	0.677083
5	80	20	KBF	None	None	8	0.694805
6	80	20	KBF	Std scalar	None	8	0.792207
7	80	20	KBF	Std scalar	PCA	4	0.772727
8	80	20	KBF	Std scalar	PCA	5	0.759742
9	80	20	Poly	Std scalar	None	8	0.7532467
10	80	20	Linear	Std scalar	None	8	0.8246753
11	80	20	Linear	Std scalar	PCA	5	0.7623376
12	80	20	Linear	Std scalar	PCA	4	0.772727
13	80	20	Sigmoid	Std scalar	None	8	0.7623376
14	80	20	-	-	LDA	4	0.8246753
15	80	20	-	-	LDA	2	0.8246753

Code : https://github.com/SivaK18/MachineLearning