1.Develop Logistic regression on prediction of disease/agriculture/finance.

Data Set Description

* Cancer
* Iris
* Lung Cancer
* AutoMPG
* Agrticulture for crop prediction
* Daibetis
* HeartDisease
* Emails classification
* Soil Moisture datset

(No of features-Continous/Discrete)

1.Data Pre-processing

2.Dimensionality Reduction (PCA, SVD, LDA) (Feature extraction)

3.Logistic regression Model

4.Evaluation Metrics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Feature Extraction | Model | Accuracy | Sensitivity/Recall | Specificity | Precision | F1-Score | Kappa Score |
| PCA |  |  |  |  |  |  |  |
| SVD |  |  |  |  |  |  |  |
| LDA |  |  |  |  |  |  |  |
| Without Feature Selection |  |  |  |  |  |  |  |

Cancer

Comparison of accuracies in terms of graphs

Justification

Write the mathematical calculation of PCA/SVD/LDA in observation