VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)
DEPARTMENT OF INFORMATION TECHNOLOGY
23-24 V Semester
AIML Lab Internals – I Q.P

1. Find best model using Linear Regression algorithm with the following instructions?

- Use Boston house price dataset (load_boston)
- Use data pre-processing with data standardization
- Use train test split – 70 %– 30%
- Select best subset of features with size – 3 and note down accuracy?

2. Find best model using Linear Regression algorithm with the following instructions?

- Use Diabetes dataset (load_diabetes)
- Use data pre-processing with min-max scaler
- Use train test split – 75 %– 25%
- Select best subset of features using co-relations and note down accuracy?

3. Find best model using Logistic Regression algorithm with the following instructions?

- Use wine dataset (load_wine)
- Use data pre-processing with data standardization.
- Use train test split – 75 %– 25%
- Select best subset of features using co-relations and note down accuracy?

4. Find best model using Logistic Regression algorithm with the following instructions?

- Use wine dataset (load_wine)
- Use train test split – 70 %– 30%

- Print accuracies for various regularization hyperparameter values: Try penalty with none, l1, l2 & elasticnet?

5. Find best model using Logistic Regression algorithm with the following instructions?

- Use iris dataset (load_iris)
- Use train test split – 70 %– 30%
- Print accuracies for various regularization hyperparameter values: Try penalty with none, l1, l2 & elasticnet?

6. Find best model using Logistic Regression algorithm with the following instructions?

- Use iris dataset (load_iris)
- Use data pre-processing with data standardization
- Use train test split – 75 %– 25%
- Select best subset of features using co-relations and note down accuracy?

7. Find best model using Logistic Regression algorithm with the following instructions?

- Use iris dataset (load_iris)
- Use data pre-processing with data standardization
- Use train test split – 70 %– 30%
- Select best subset of features with size – 2 and note down accuracy?

8. Find best model using Logistic Regression algorithm with the following instructions?

- Use iris dataset (load_iris)
- Use data pre-processing with min-max scaler
- Use train test split – 70 %– 30%

- Select best subset of features with size – 2 and note down accuracy?

9. Find best model using KNeighborsClassifier() on breast_cancer data for the following parameters
- different K values(3,4,5)
- different distance metrics (manhattan, euclidean)
- weights of the neighbours (uniform, distance)
- different data structures (bruteforce, kdtree, balltree)
- Print k Neighbours for each test point

10. Find best model using RadiusNeighborsClassifier () on breast_cancer data for the following parameters
- different radius values(0.5, 1, 1.5)
- different distance metrics (manhattan, euclidean)
- weights of the neighbours (uniform, distance)
- different data structures (bruteforce, kdtree, balltree)
- Print k Neighbours for each test point

11. Find best model using KNeighborsRegressor () on Diabetes dataset for the following parameters
- different K values(3,4,5)
- different distance metrics (manhattan, euclidean)
- weights of the neighbours (uniform, distance)
- different data structures (bruteforce, kdtree, balltree)
- Print k Neighbours for each test point

12. Find best model using KNeighborsClassifier() on breast_cancer data for the following parameters
- different K values(3,4,5)
- different distance metrics (euclidean)
- weights of the neighbours (distance)
- different data structures (kdtree)
- Compare with Logistic Regression.