Scenario1:

Domain: Machine Learning – Regression

Requirement: To predict the electricity demand based on the past usage.

1. Collect the data: Collect regions, past usage, temperature and time of year.
2. Preprocess the data: Preprocess the categorical data using One hot encoding, Label encoding, standardization technique etc.,
3. Split the input and output data
4. Split the training and test data
5. Choose the Algorithm: Create the model using algorithms by executing MLR, DT, SVM, RF etc
6. Evaluate the metrics. Save the model which gives best r2_score value
7. Predict the model: Predict the electricity demand
8. Load the Model and deploy it.

Scenario2:

Domain: Machine Learning – Classification

Requirement: To filter out fake product based on the review.

1. Collect the data: Collect the product details and its review.
2. Preprocess the data: Preprocess the categorical data using One hot encoding, Label encoding, standardization technique etc.,
3. Split the input and output data
4. Split the training and test data
5. Choose the Algorithm: Create the model using algorithms by executing LogisticRegression, DT,SVM,RF,KNN,NB etc
6. Evaluate the metrics. Save the model which gives best accuracy, best Recall, Precision, F1_score based on the classification report
7. Predict the model: Predict the product fake or not
8. Load the Model and deploy it.

Scenario3:

Domain: Machine Learning – Regression

Requirement: To estimate the traffic congestion levels.

1. Collect the data: Collect GPS data, road construction reports, and weather conditions
2. Preprocess the data: Preprocess the categorical data using One hot encoding, Label encoding, standardization technique etc.,
3. Split the input and output data
4. Split the training and test data
5. Choose the Algorithm: Create the model using algorithms by executing MLR, DT, SVM, RF etc
6. Evaluate the metrics. Save the model which gives best r2_score value
7. Predict the model: Predict the Traffic congestion levels
8. Load the Model and deploy it.

Scenario4:

Domain: Machine Learning – Classification

Requirement: To predict loan is approved or rejected.

1. Collect the data: Collect the income, credit history, and previous loan repayment behavior.
2. Preprocess the data: Preprocess the categorical data using One hot encoding, Label encoding, standardization technique etc.,
3. Split the input and output data
4. Split the training and test data
5. Choose the Algorithm: Create the model using algorithms by executing LogisticRegression, DT,SVM,RF,KNN,NB etc
6. Evaluate the metrics. Save the model which gives best accuracy, best Recall, Precision, F1_score based on the classification report
7. Predict the model: Predict the loan approved or not
8. Load the Model and deploy it.

Scenario5:

Domain: Machine Learning – Classification

Requirement: To detect product defect or not

1. Collect the data: Collect the image details.
2. Preprocess the data: Preprocess the categorical data using One hot encoding, Label encoding, standardization technique etc.,
3. Split the input and output data
4. Split the training and test data
5. Choose the Algorithm: Create the model using algorithms by executing LogisticRegression, DT,SVM,RF,KNN,NB etc
6. Evaluate the metrics. Save the model which gives best accuracy, best Recall, Precision, F1_score based on the classification report
7. Predict the model: Predict the product defect or not
8. Load the Model and deploy it.

Scenario6:

Domain: Machine Learning – Classification

Requirement: To best crop to grow

1. Collect the data: Collect the soil composition, rainfall, and past harvest data
2. Preprocess the data: Preprocess the categorical data using One hot encoding, Label encoding, standardization technique etc.,
3. Split the input and output data
4. Split the training and test data
5. Choose the Algorithm: Create the model using algorithms by executing LogisticRegression, DT,SVM,RF,KNN,NB etc
6. Evaluate the metrics. Save the model which gives best accuracy, best Recall, Precision, F1_score based on the classification report
7. Predict the model: Predict the best crop which can be grown in the soil.
8. Load the Model and deploy it.

Scenario7:

Domain: Machine Learning – Classification

Requirement: To analyze customer responses to different types of advertisements

1. Collect the data: Collect the different types of advertisements and promotions
2. Preprocess the data: Preprocess the categorical data using One hot encoding, Label encoding, standardization technique etc.,
3. Split the input and output data
4. Split the training and test data
5. Choose the Algorithm: Create the model using algorithms by executing LogisticRegression, DT,SVM,RF,KNN,NB etc
6. Evaluate the metrics. Save the model which gives best accuracy, best Recall, Precision, F1_score based on the classification report
7. Predict the model: Predict the customer response positive or negative.
8. Load the Model and deploy it.

Scenario8:

Domain: Machine Learning – Classification

Requirement: To code contains bug or not

1. Collect the data: Collect the source code details
2. Preprocess the data: Preprocess the categorical data using One hot encoding, Label encoding, standardization technique etc.,
3. Split the input and output data
4. Split the training and test data
5. Choose the Algorithm: Create the model using algorithms by executing LogisticRegression, DT,SVM,RF,KNN,NB etc
6. Evaluate the metrics. Save the model which gives best accuracy, best Recall, Precision, F1_score based on the classification report
7. Predict the model: Predict the code contains bug or not
8. Load the Model and deploy it.

Scenario9:

Domain: Machine Learning – Regression

Requirement: To describe the workout plans.

1. Collect the data: Collect exercise history, fitness level, and preferences.
2. Preprocess the data: Preprocess the categorical data using One hot encoding, Label encoding, standardization technique etc.,
3. Split the input and output data
4. Split the training and test data
5. Choose the Algorithm: Create the model using algorithms by executing MLR, DT, SVM, RF etc
6. Evaluate the metrics. Save the model which gives best r2_score value
7. Predict the model: describe the work out plans
8. Load the Model and deploy it.

Scenario10:

Domain: Machine Learning – Classification

Requirement: To detect account fake or not

1. Collect the data: Collect the user activity, posting patterns, and interactions
2. Preprocess the data: Preprocess the categorical data using One hot encoding, Label encoding, standardization technique etc.,
3. Split the input and output data
4. Split the training and test data
5. Choose the Algorithm: Create the model using algorithms by executing LogisticRegression, DT,SVM,RF,KNN,NB etc
6. Evaluate the metrics. Save the model which gives best accuracy, best Recall, Precision, F1_score based on the classification report
7. Predict the model: Predict the account fake or not
8. Load the Model and deploy it.