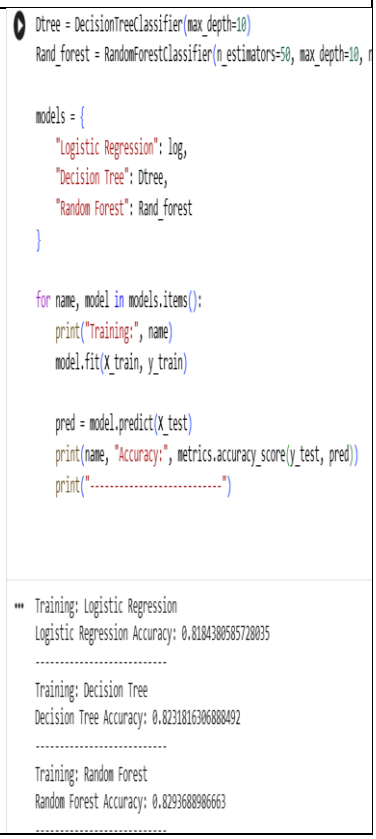
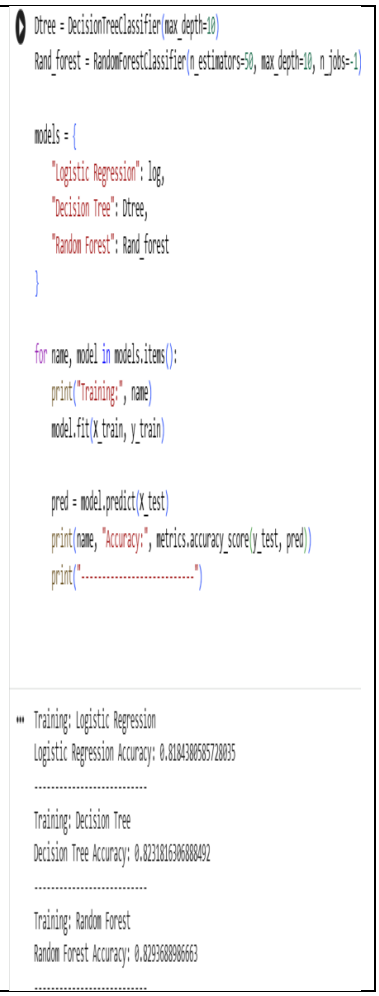
Project Development Phase
Model Performance Test

Date	11-02-2026
Team ID	LTVIP2026TMIDS57051
Project Name	Exploratory Analysis of Rainfall Data in India for Agriculture.
Maximum Marks	

Model Performance Testing:

Project team shall fill the following information in model performance testing template.

S.No.	Parameter	Values	Screenshots
1.	Model Summary	-	-
2.	Accuracy	Training Accuracy – 0.82 Validation Accuracy -0.78	

3.	Fine Tunning Result(if Done)	Validation Accuracy -0.78	

```
Dtree = DecisionTreeClassifier(max_depth=10)
Rand_forest = RandomForestClassifier(n_estimators=50, max_depth=10, n_jobs=-1)

models = {
    "Logistic Regression": log,
    "Decision Tree": Dtree,
    "Random Forest": Rand_forest
}

for name, model in models.items():
    print("Training:", name)
    model.fit(X_train, y_train)

    pred = model.predict(X_test)
    print(name, "Accuracy:", metrics.accuracy_score(y_test, pred))
    print("----------------------------")
```

```
Training: Logistic Regression
Logistic Regression Accuracy: 0.8184380585720035
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Training: Decision Tree
Decision Tree Accuracy: 0.8231816306888492
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Training: Random Forest
Random Forest Accuracy: 0.8293688886663
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```