**Plot Graph**

import matplotlib.pyplot as plt

# Create comparison graph

algorithms = ['Random Forest', 'Decision Tree', 'Logistic Regression', 'Gradient Boosting']

accuracy\_scores = [rf\_acc, dt\_acc, lg\_acc, xg\_acc]

f1\_scores = [rf\_f1, dt\_f1, lg\_f1, xg\_f1]

recall\_scores = [rf\_recall, dt\_recall, lg\_recall, xg\_recall]

precision\_scores = [rf\_precision, dt\_precision, lg\_precision, xg\_precision]

time\_cost = [rf\_time,dt\_time, lg\_time, xg\_time]

plt.figure(figsize=(10, 6))

plt.plot(algorithms, accuracy\_scores, marker='o', label='Accuracy')

plt.plot(algorithms, f1\_scores, marker='o', label='F1 Score')

plt.plot(algorithms, recall\_scores, marker='o', label='Recall')

plt.plot(algorithms, precision\_scores, marker='o', label='Precision')

plt.title('Algorithm Comparison')

plt.xlabel('Algorithm')

plt.ylabel('Score')

plt.legend()

plt.show()