Explanation of files.

1. Linear_regression_model.ipynb file is the code file for multiple linear regression model with accuracy 25% (very less accuracy because data is time series data).

2.Linear_regression_model2.ipynb file is the code file for multiple linear regression model with accuracy 25% but with prediction result of each individual data.(Predicting the sigle observation results).

3. tuned_regression_models.ipynb file is the code file for the implimentation of different regression model to increase the accuracy ,in which i have implimented the Linear regression(accuracy 25%),Linear regression with L2 regularization(accuracy 25%),Polynomial regression(accuracy 31%),Polynomial regression with regularization(accuracy 31%),Random forest regression(accuracy 99.99),Nearest neighbor regression(accuracy 75%).
best model was observed on Random forest regression with accuracy 99.99%.

4.Prediction_statistics_with_Random_forest_regression.ipynb is the code file for data visualisation using matplotlib and seaborn .In this program i have visualised actual value and predicted value.

5.best_regression_model.pkl is the saved model for Random_forest_regression model.

6.multiple_regression_model.pkl is the saved model for simple multiple linear regression model.

7.data.csv is the data used for yield prediction.

8.crop_predict_app.py is python app which uses flask as a backend

9.templates directory contain the two html file (home.html and predict .html)which are used as a frotened with flask.

10.images directory contain the different images file which are obtained during result prediction.

How to use code.

Run the file crop_predict_app.py after unzipping the zipped folder and keep the files in the same folder as they are .
If you got the error while running the file ,please change the path of file in the codes .

Thanks for reading