**INSURANCE CHARGES PREDICTION**

**Grid – Support Vector Machine Regressor:**

The best model combination:

('C': 3000, 'gamma': 'scale', 'kernel': 'poly')

The r score value is 0.8598930084494368

**Grid -Decision Tree Regressor:**

The best model combination:

('criterion': 'squared\_error', 'max\_features': 'auto', 'splitter': 'best')

The r score value is : 0.6790078998611935

**Grid Random Forest Regressor:**

The best model combination

('criterion': 'friedman\_mse', 'max\_features': 'log2', 'n\_estimators': 100)

The r score value is : 0.8698625852660685

**Grid Ada Boost Regressor:**

The best model combination:

('loss': 'linear', 'n\_estimators')

The r score value is: 0.8639155091393703

**Grid LG Boost Regressor:**

The best model combination:

('boosting\_type': 'gbdt', 'class\_weight': 'balanced', 'estimators': 100)

The r score value is: 0.86603193419773

**Deployment Model**:

Grid Random Forest Regressor with R score value is 0.8698625852660685.

The combination

'criterion': 'friedman\_mse', 'max\_features': 'log2', 'n\_estimators': 100

This is final model for given insurance dataset