Model Building

Model Evaluation

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Team ID	PNT2022TMID18078
Project Name	DemandEst - AI powered Food Demand Forecaster

Model Evaluation

```
In [67]:  LR = LinearRegression()
          LR.fit(x_train,y_train)
          y_pred = LR.predict(x_val)
          y_pred[y_pred<0]=0
          from sklearn import metrics
          print('RMSLE:',100*np.sqrt(metrics.mean_squared_log_error(y_val,y_pred)))
```

RMSLE: 129.8095924419418

```
In [68]:  L=Lasso()
          L.fit(x_train,y_train)
          y_pred=LR.predict(x_val)
          y_pred[y_pred<0]=0
          from sklearn import metrics
          print('RMSLE:',100*np.sqrt(metrics.mean_squared_log_error(y_val,y_pred)))
```

RMSLE: 129.8095924419418

```
In [69]:  EN=ElasticNet()
          EN.fit(x_train,y_train)
          y_pred=EN.predict(x_val)
          y_pred[y_pred<0]=0
          from sklearn import metrics
          print('RMSLE:',100*np.sqrt(metrics.mean_squared_log_error(y_val,y_pred)))
```

RMSLE: 131.23278835846813

```
In [70]:  DT=DecisionTreeRegressor()
          DT.fit(x_train,y_train)
          y_pred=DT.predict(x_val)
          y_pred[y_pred<0]=0
          from sklearn import metrics
          print('RMSLE:',100*np.sqrt(metrics.mean_squared_log_error(y_val,y_pred)))
```

RMSLE: 62.85827099088529

```
In [71]:  KNN=KNeighborsRegressor()
          KNN.fit(x_train,y_train)
          y_pred=KNN.predict(x_val)
          y_pred[y_pred<0]=0
          from sklearn import metrics
          print('RMSLE:',100*np.sqrt(metrics.mean_squared_log_error(y_val,y_pred)))
```

RMSLE: 66.49955164596949

```
In [72]:  GB=GradientBoostingRegressor()
          GB.fit(x_train,y_train)
          y_pred=GB.predict(x_val)
          y_pred[y_pred<0]=0
          from sklearn import metrics
          print('RMSLE:',100*np.sqrt(metrics.mean_squared_log_error(y_val,y_pred)))
```

RMSLE: 97.11281806834916