Model Building

Model Evaluation

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Team ID	PNT2022TMID18620
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
```