

Numerical dataset

dataset name : Housing

number of classes: 10

we want to predict median_house_value

data rows : 20640

The number of samples used in training : 16512

The number of samples used in testing : 4128

dataset classes :

```
Data columns (total 10 columns):
#      Column                                Non-Null Count  Dtype
---  -
0     longitude                             20640 non-null  float64
1     latitude                               20640 non-null  float64
2     housing_median_age                     20640 non-null  float64
3     total_rooms                             20640 non-null  float64
4     total_bedrooms                         20640 non-null  float64
5     population                             20640 non-null  float64
6     households                             20640 non-null  float64
7     median_income                           20640 non-null  float64
8     median_house_value                     20640 non-null  float64
9     ocean_proximity                       20640 non-null  object
dtypes: float64(9), object(1)
```

We made 2 models

1. Linear Regression model
2. K Neighbors Regressor

Linear Regression model

Here is the model evaluation

Mean Squared Error: 4794026140.10

Mean Absolute Error: 50990.17

R-Squared: 0.64

K Neighbors Regressor

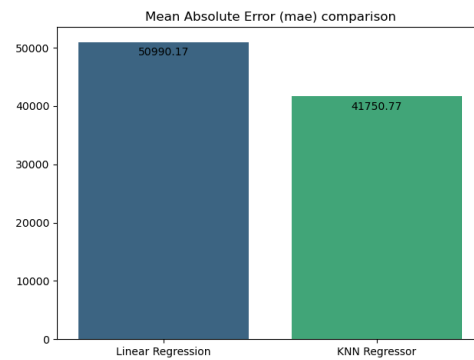
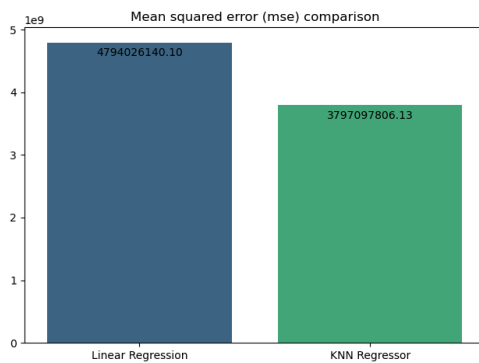
Here is the model evaluation

Mean Squared Error: 3797097806.127921

Mean Absolute Error: 41750.77063953488

R-Squared: 0.722263437057932

comparison



As figure show us KNN is better