MODEL SAVING

Linear Regression

```
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```

Linear Regression Model

```
In [38]: lr=LinearRegression()
```

Making a pipeline

```
In [39]: pipe=make_pipeline(column_trans,lr)
```

Fitting the model

```
In [40]: pipe.fit(X_train,y_train)
```

```
Out[40]: Pipeline(steps=[('columntransformer',
                          ColumnTransformer(remainder='passthrough',
                                            transformers=[('onehotencoder',
                                                           OneHotEncoder(categories=[array(['Audi A3 Cabriolet', 'Audi A4 1.8', 'Audi A4 2.0', 'Audi A6 2.0',
                 'Audi A8', 'Audi Q3 2.0', 'Audi Q5 2.0', 'Audi Q7', 'BMW 3 Series',
                 'BMW 5 Series', 'BMW 7 Series', 'BMW X1', 'BMW X1 sDrive20d',
                 'BMW X1 xDrive20d', 'Chevrolet Beat', 'Chevrolet Beat...
                                                                           array(['Audi', 'BMW', 'Chevrolet', 'Datsun', 'Fiat', 'Force', 'Ford',
                 'Hindustan', 'Honda', 'Hyundai', 'Jaguar', 'Jeep', 'Land',
                 'Mahindra', 'Maruti', 'Mercedes', 'Mini', 'Mitsubishi', 'Nissan',
                 'Renault', 'Skoda', 'Tata', 'Toyota', 'Volkswagen', 'Volvo'],
                 dtype=object),
                                                                           array(['Diesel', 'LPG', 'Petrol'], dtype=object)]),
                                                          ['name', 'company',
                                                           'fuel_type'])])),
                         ('linearregression', LinearRegression())])
```

```
In [41]: y_pred=pipe.predict(X_test)
```

Checking R2 Score

```
In [42]: r2_score(y_test,y_pred)
```