ARTIFICIAL INTELLIGENCE

ASSIGNMENT – IV

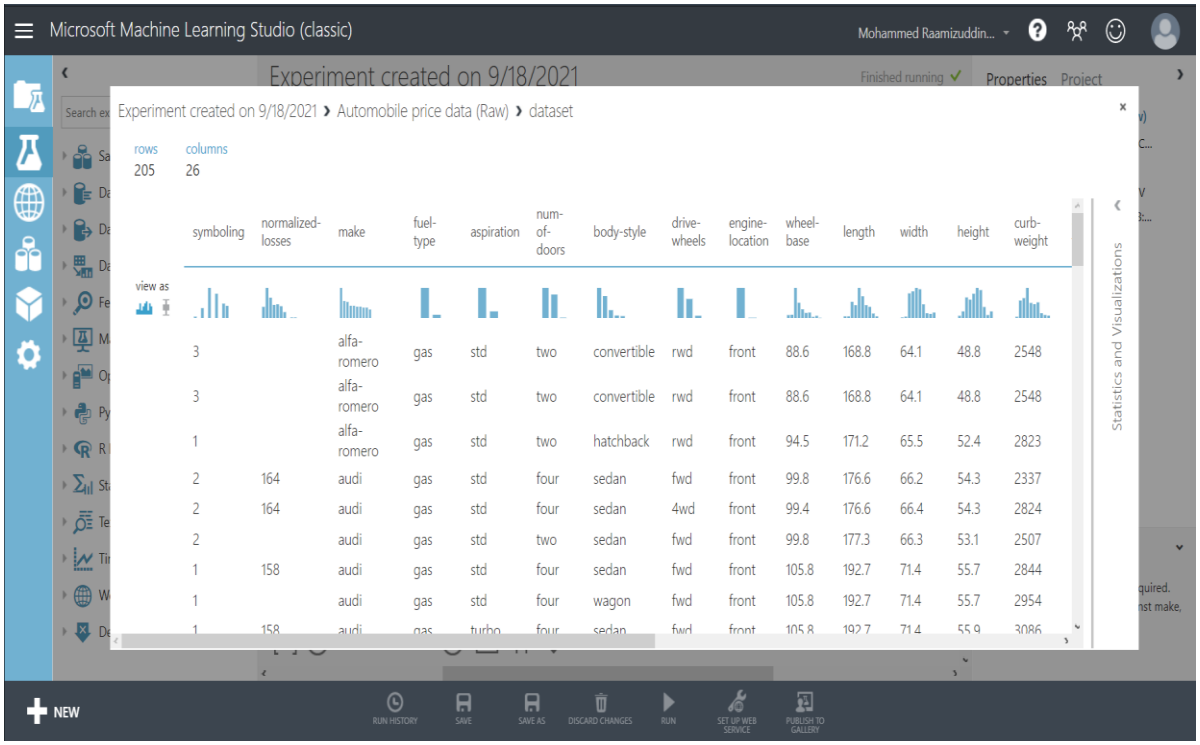
Software Used: Microsoft Azure Machine Learning Studio.

About the Assignment: The model used in this assignment is Linear Regression Model. The trained model finds the price of the automobile based on certain parameters. The Steps Followed in Workflow are:

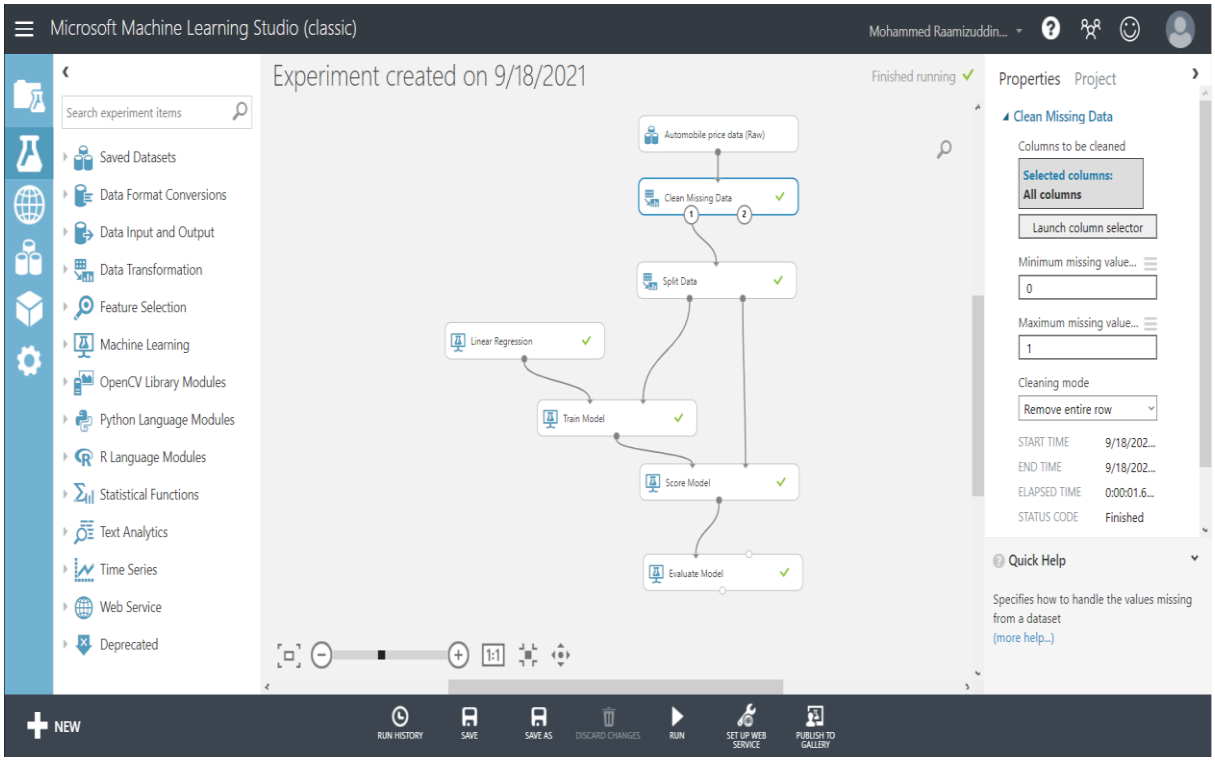
1. Load the data.
2. Study the data and find out the necessary variables.
3. Pre-Process the data.
4. Choose the model to be used (Linear Regression Model in this case)
5. Split the data for training and testing.
6. Train the model with the training data.
7. Score the model using the testing data.
8. Evaluate the model based on the results.

Workflow:

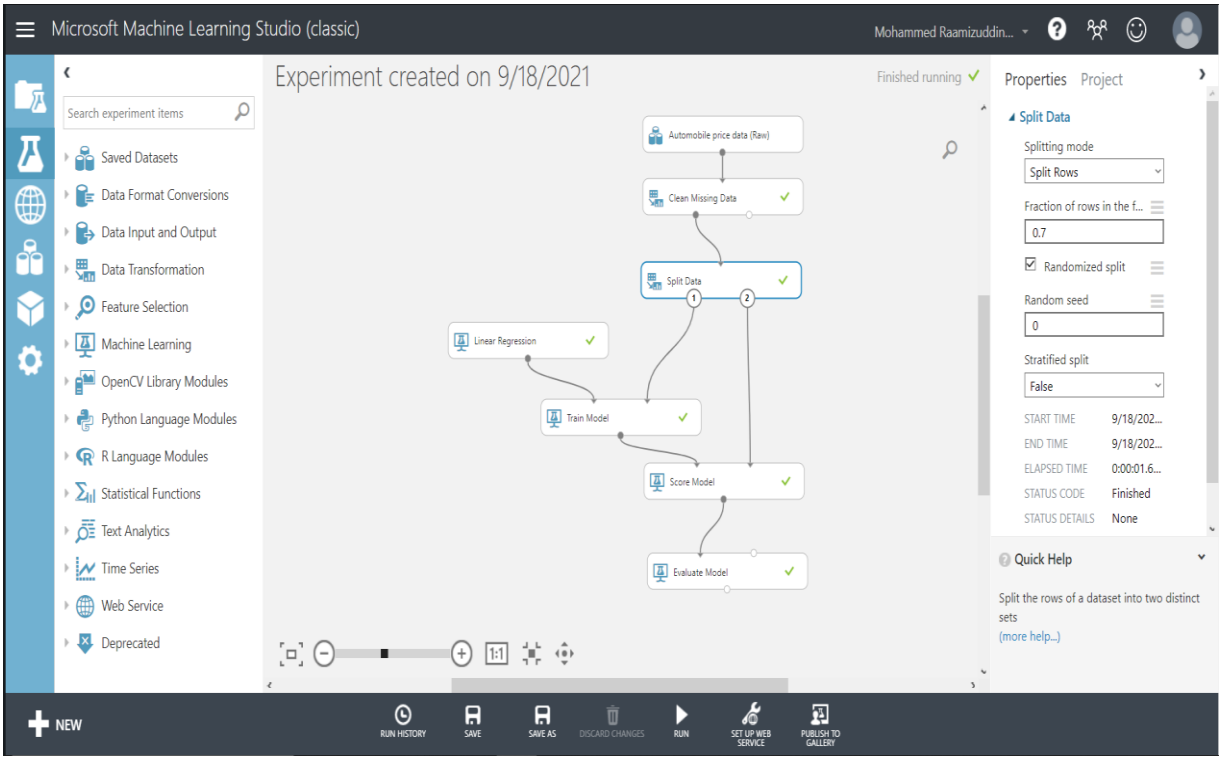
- Study the data:



- Remove the missing data:

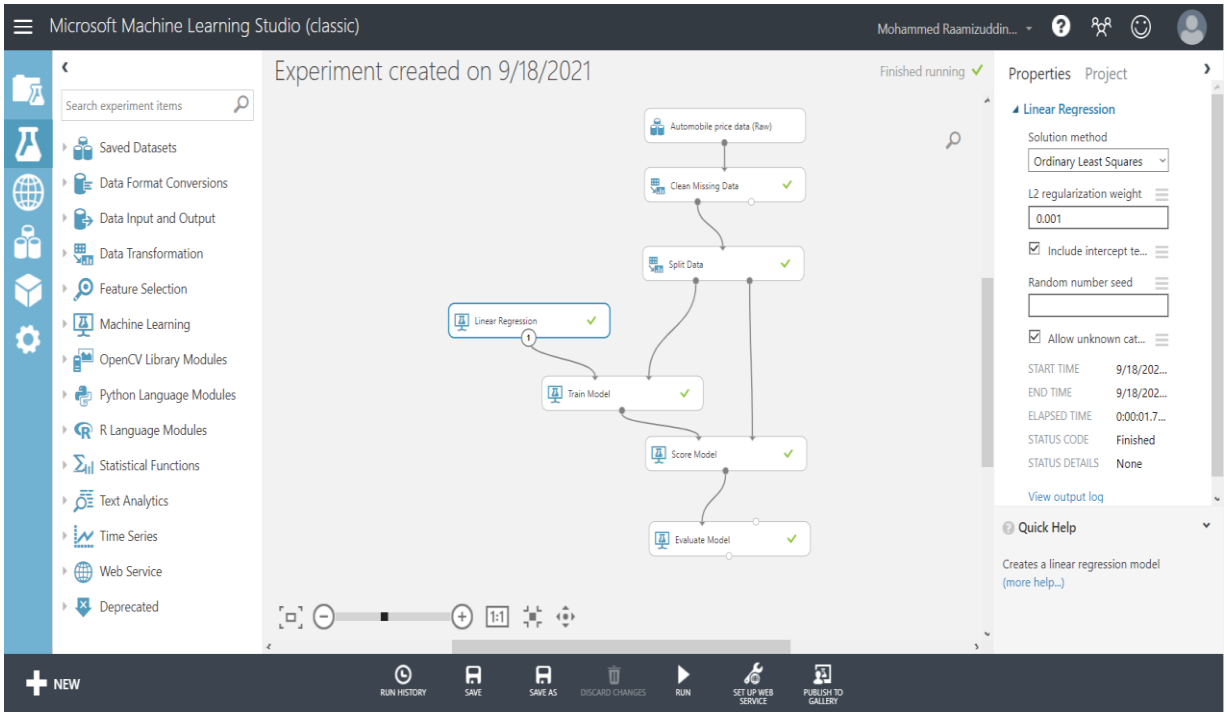


- Splitting the data:

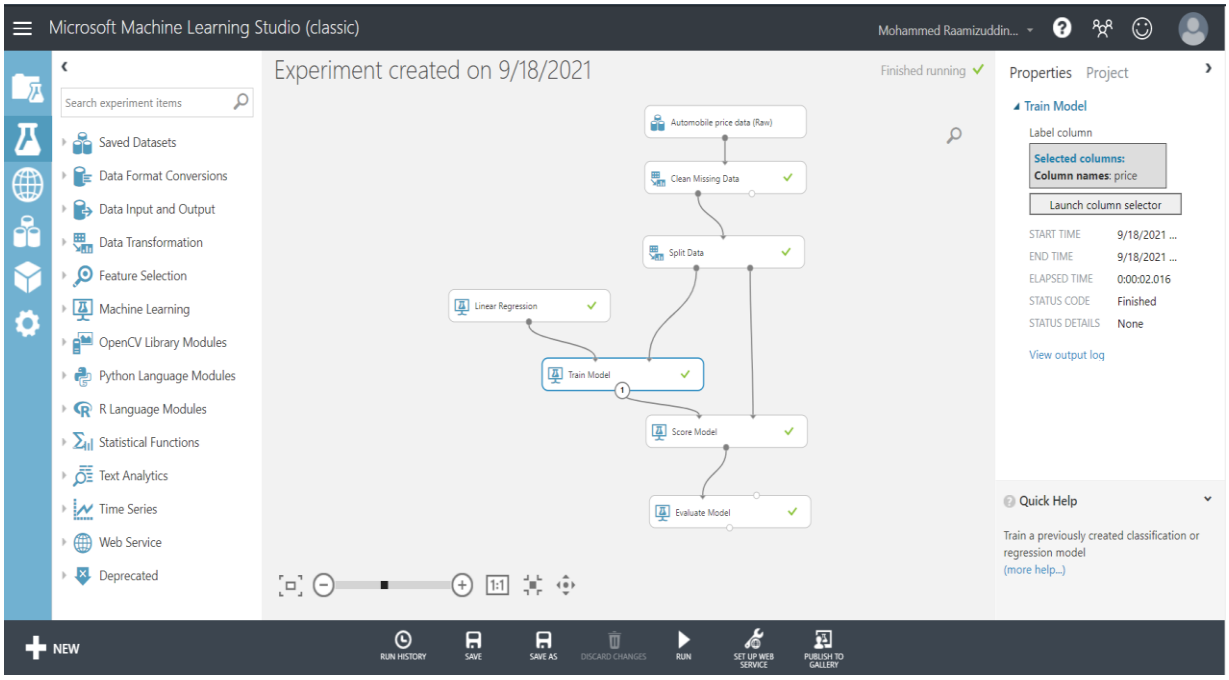


Next steps are to initialize the model and train the model for the prediction of prices depending on all the other data items in columns of the table.

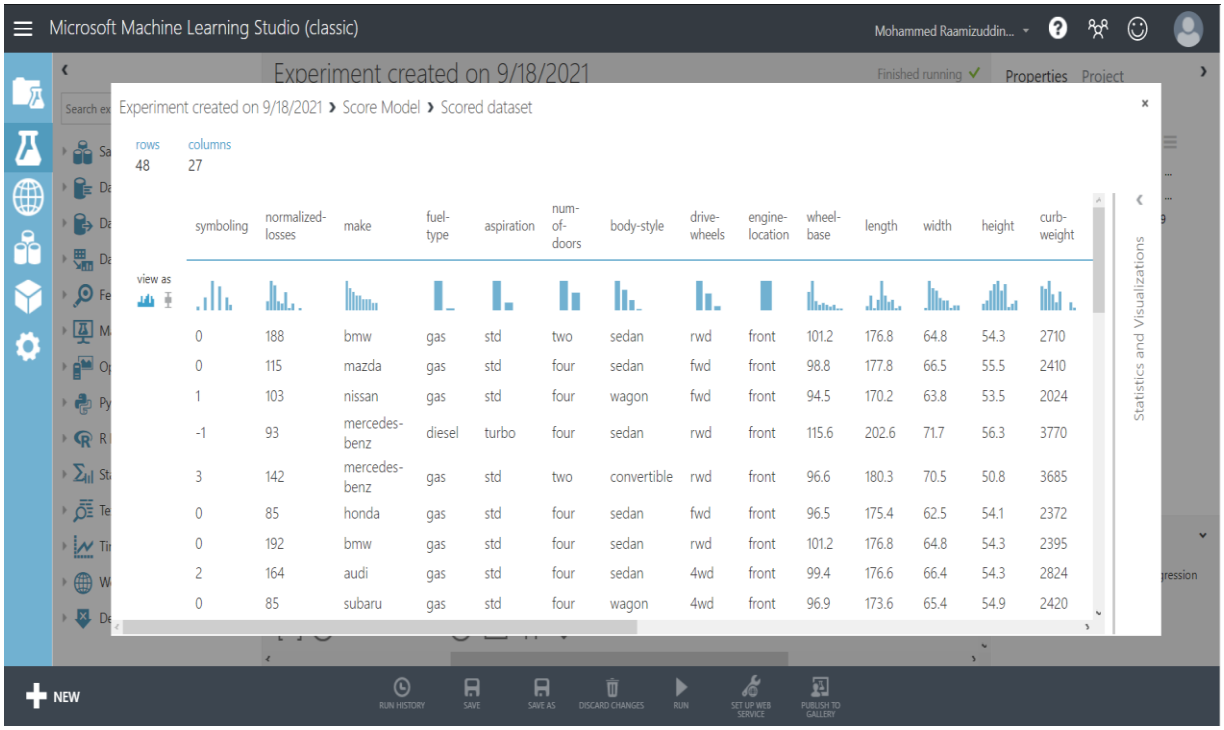
- Model initialization:



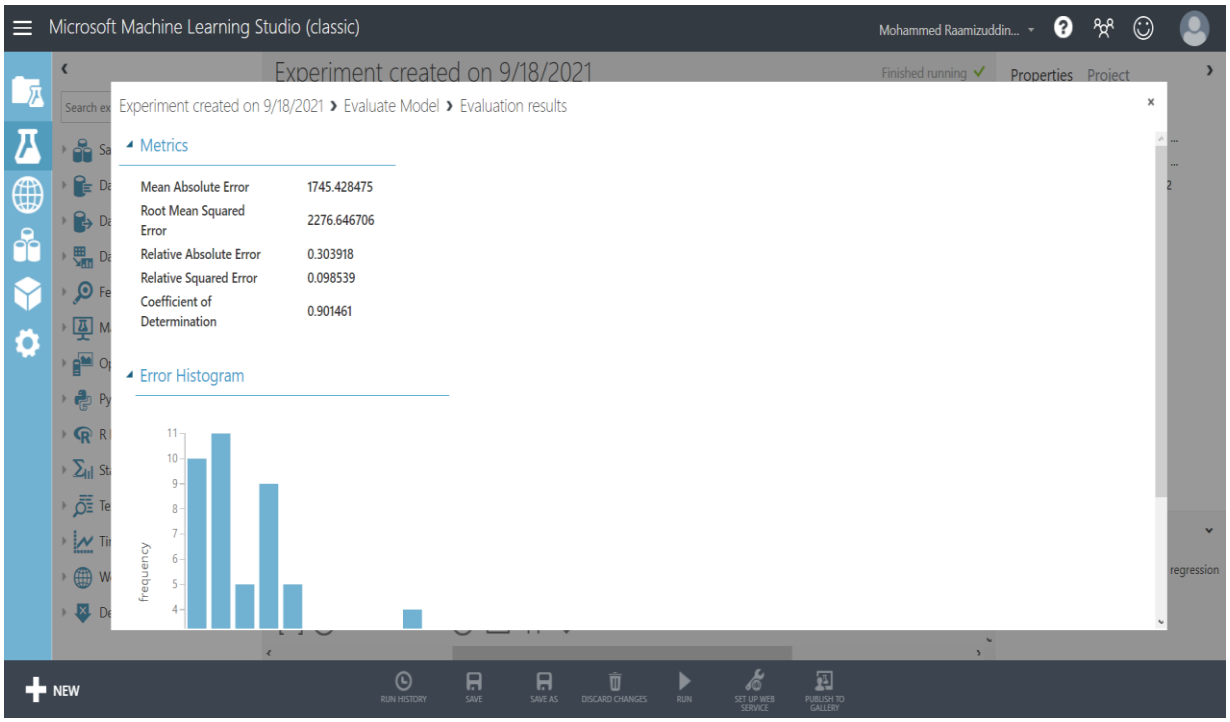
- Training model and Scored dataset:



The result of the prediction is that the price is predicted with an accuracy of 90.14 percent (%) as per the evaluation the model is able to predict outcome properly in most cases.



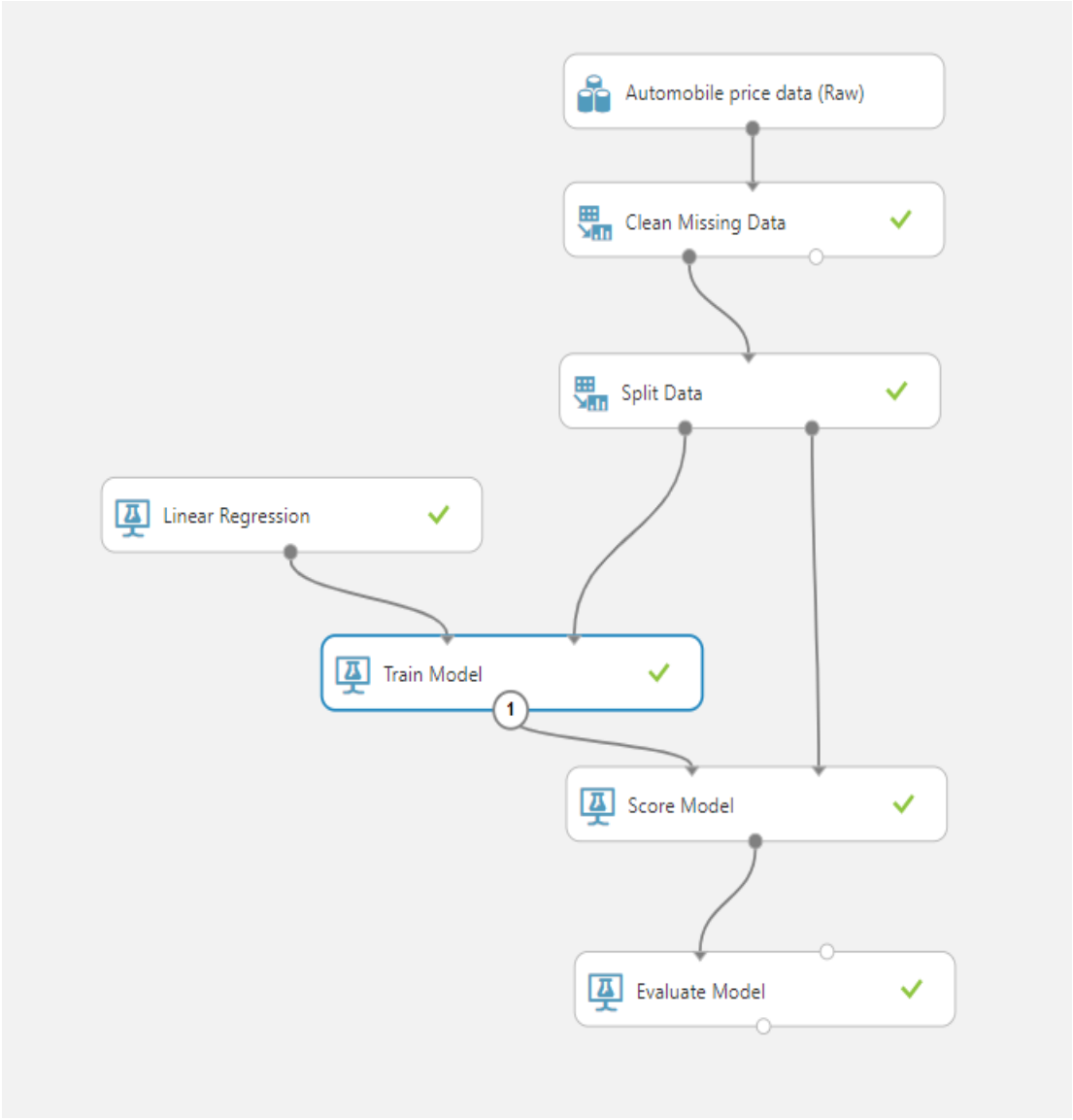
- Result:



The parameters used to determine price are:

All the parameters of 27 Columns are used to determine the price.

- Workflow:


Automobile price data (Raw)
Clean Missing Data
Split Data
Linear Regression
Train Model
1
Score Model
Evaluate Model