Microsoft

Linear Regression model using OLS

Contents

Goals and Requirements

Estimated time to complete lab is 40-45 minutes

Goals

1. Implement and design a predictive model to predict the price of vehicle based on past data.

2. Approach of using Linear Regression using OLS

Requirements:

1. Access to an Azure Machine Learning Studio

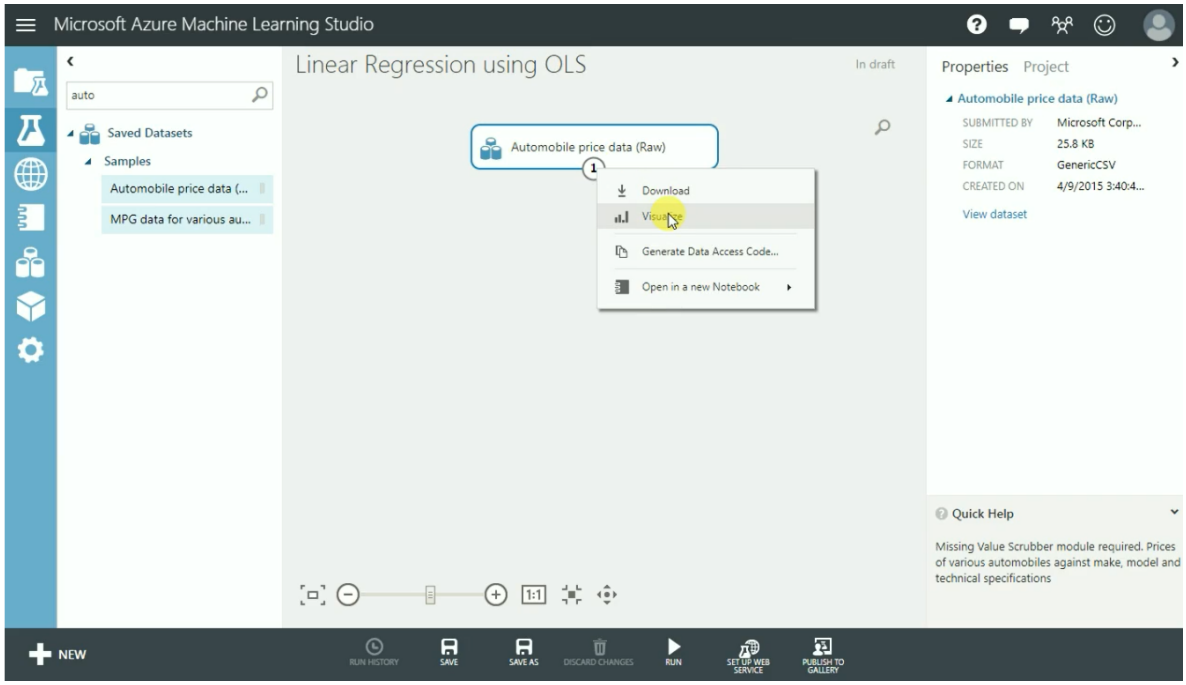
Build Linear Regression Model

Business Problem

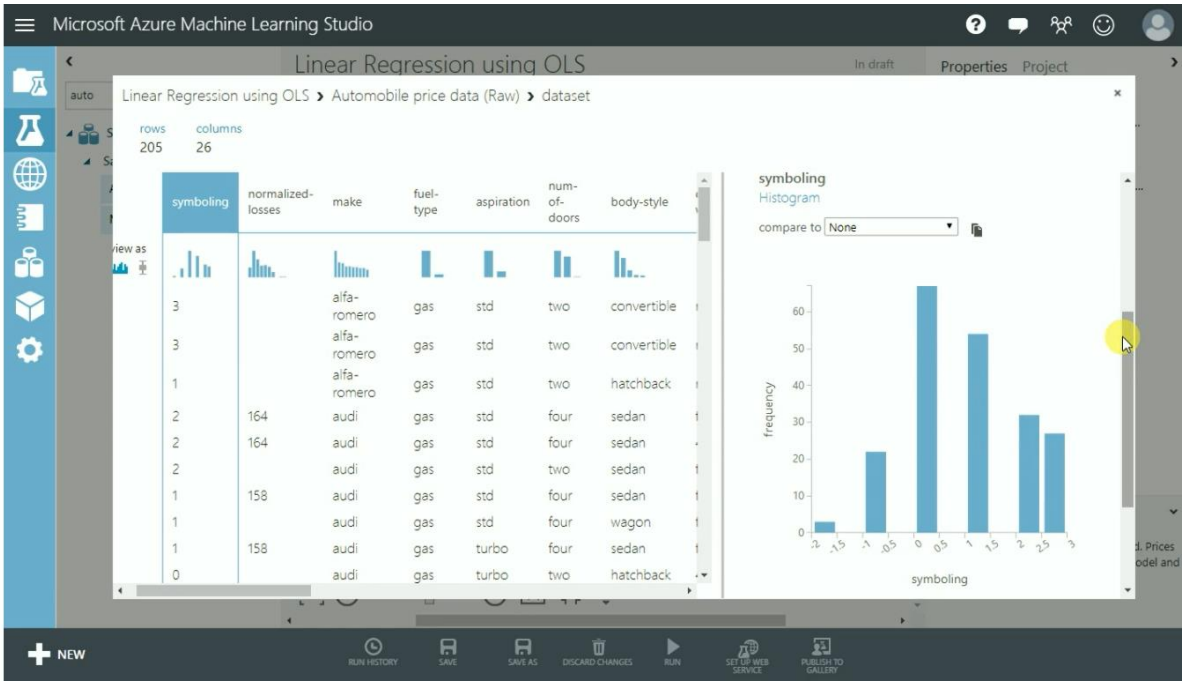
Build a model to predict the price of the vehicle based on the available historic data

Automobile price dataset

Search automobile price dataset and visualize the data

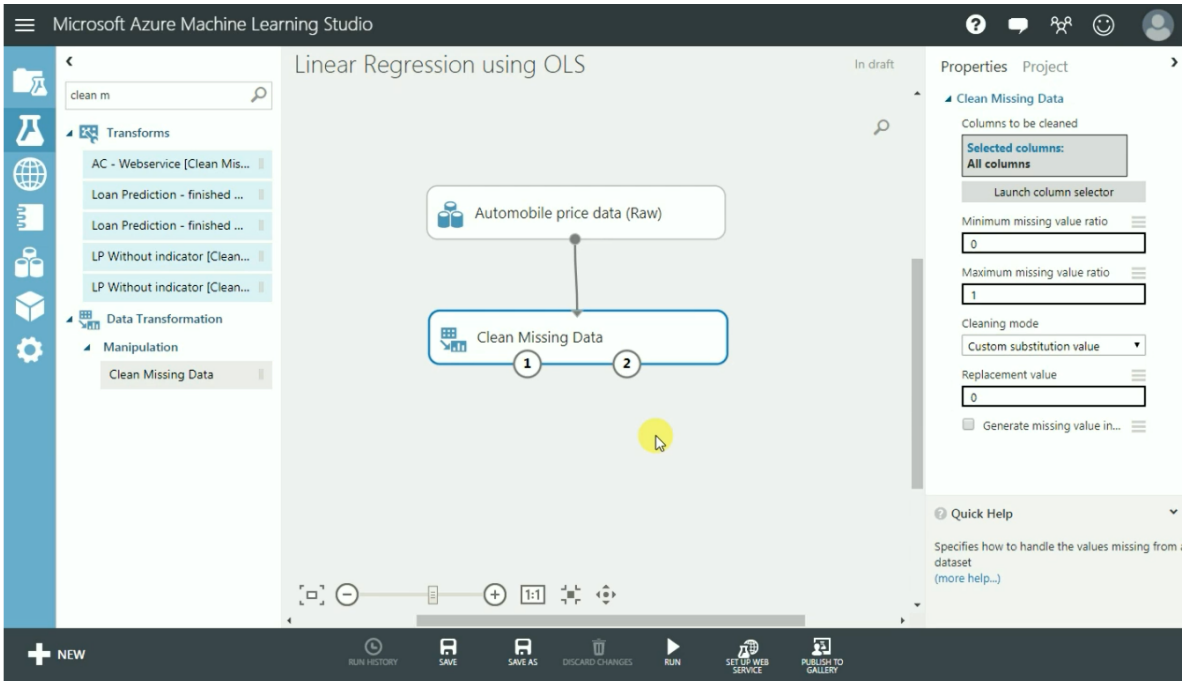


Check the columns involved and their features for knowing missing values and metadata

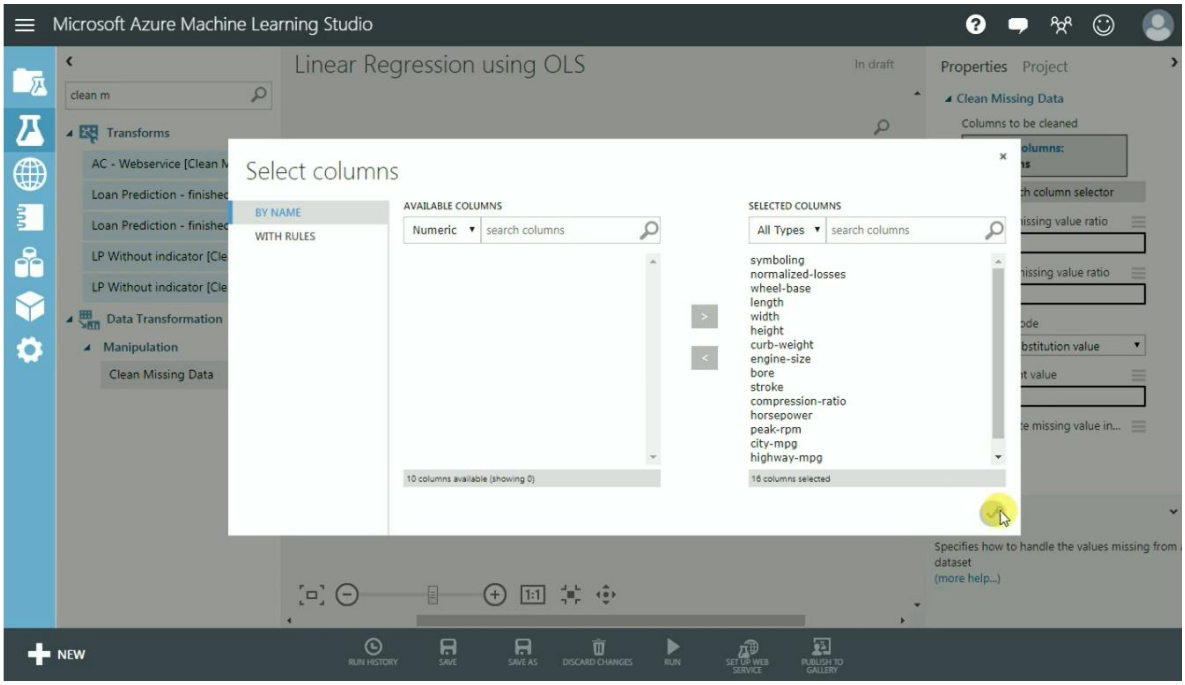


Dataset for Clean Missing Data

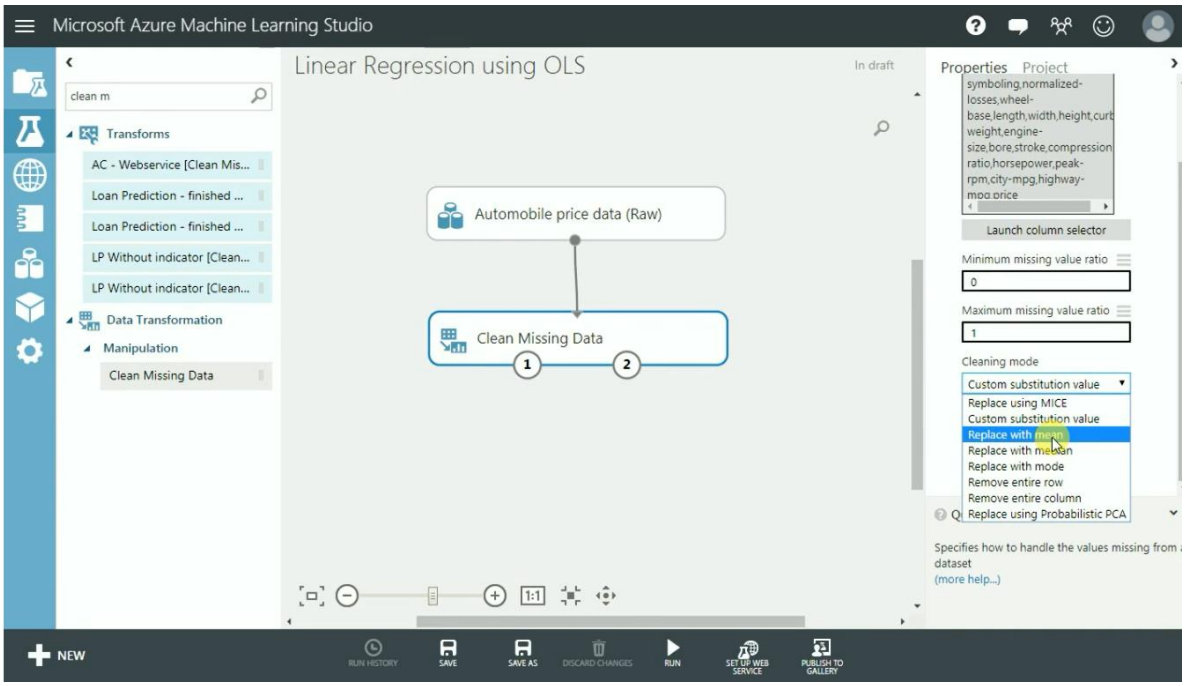
Add clean missing data in canvas and connect the nodes



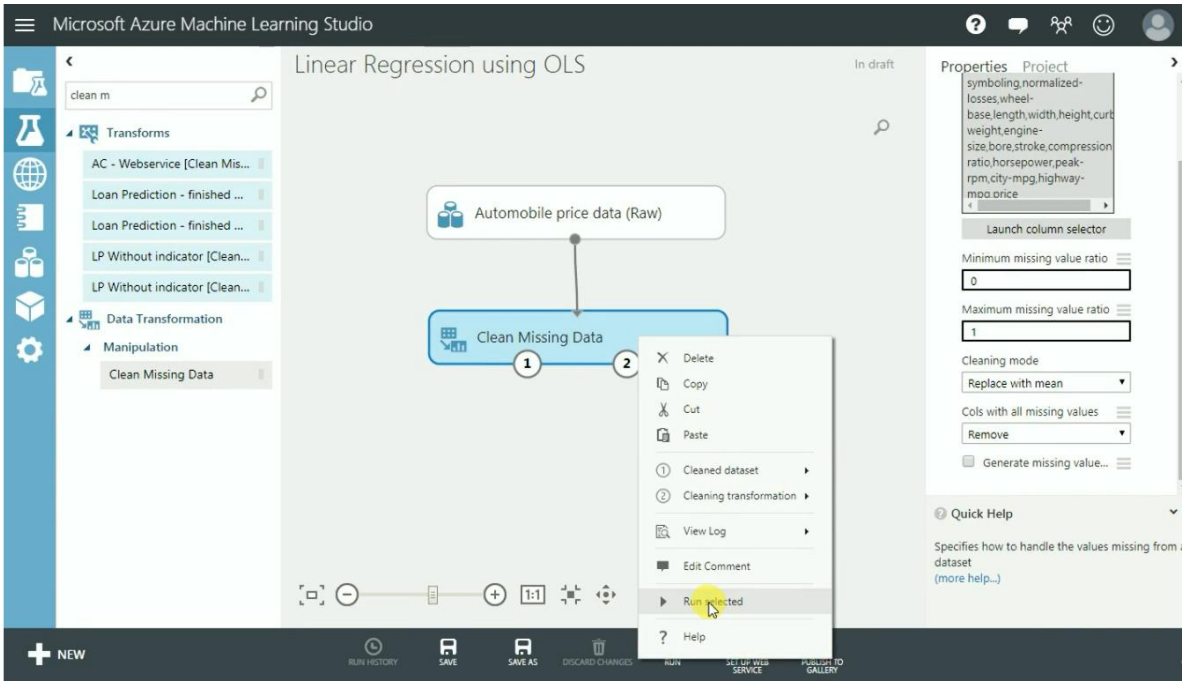
Launch column selector and select all numeric features, press ok



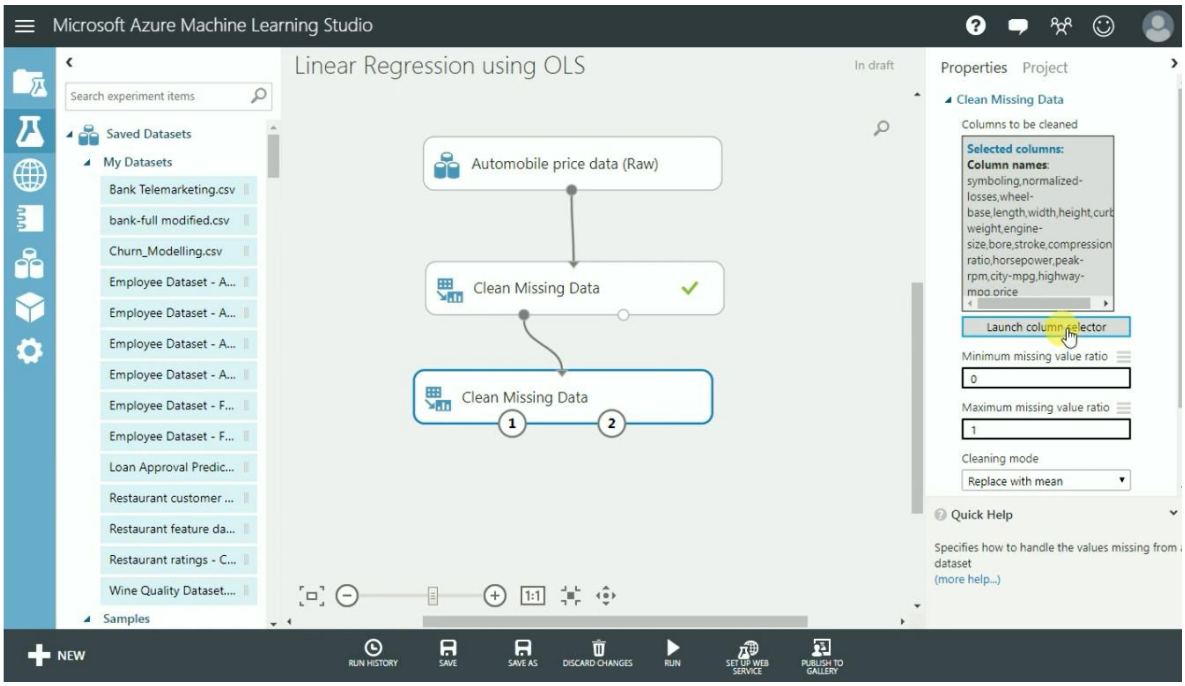
Replace with mean



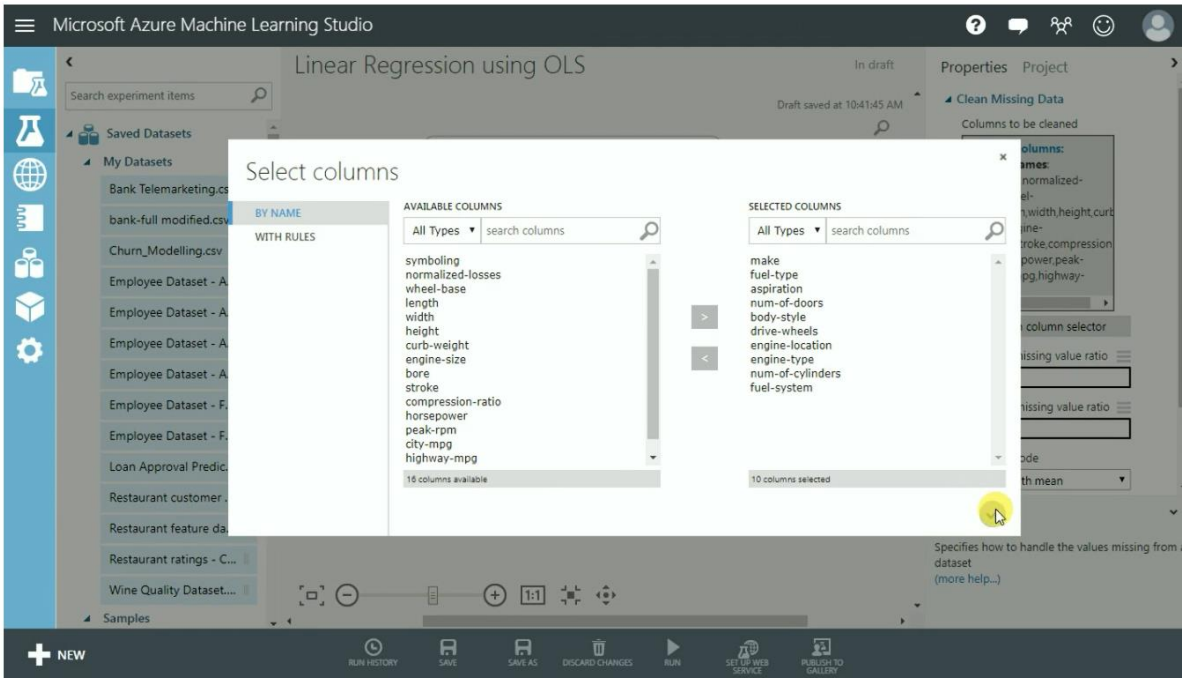
Run the module



Copy and paste another clean missing data for string features

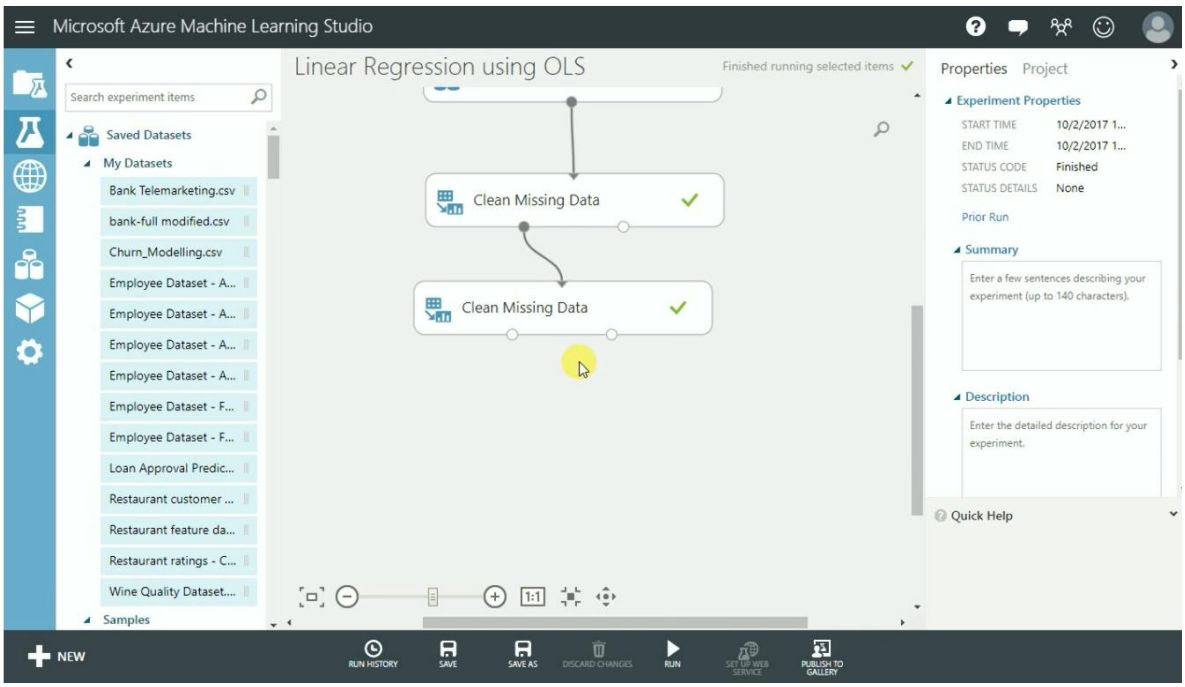


Launch column selector and select string variables and press ok

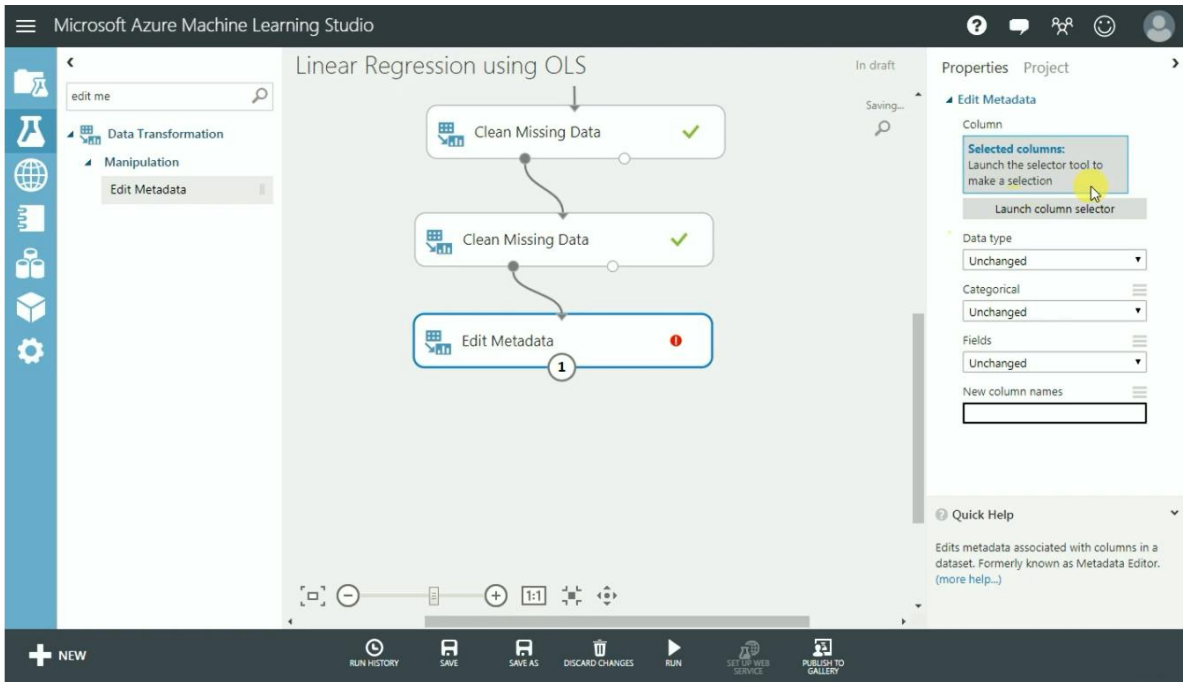


Edit Metadata

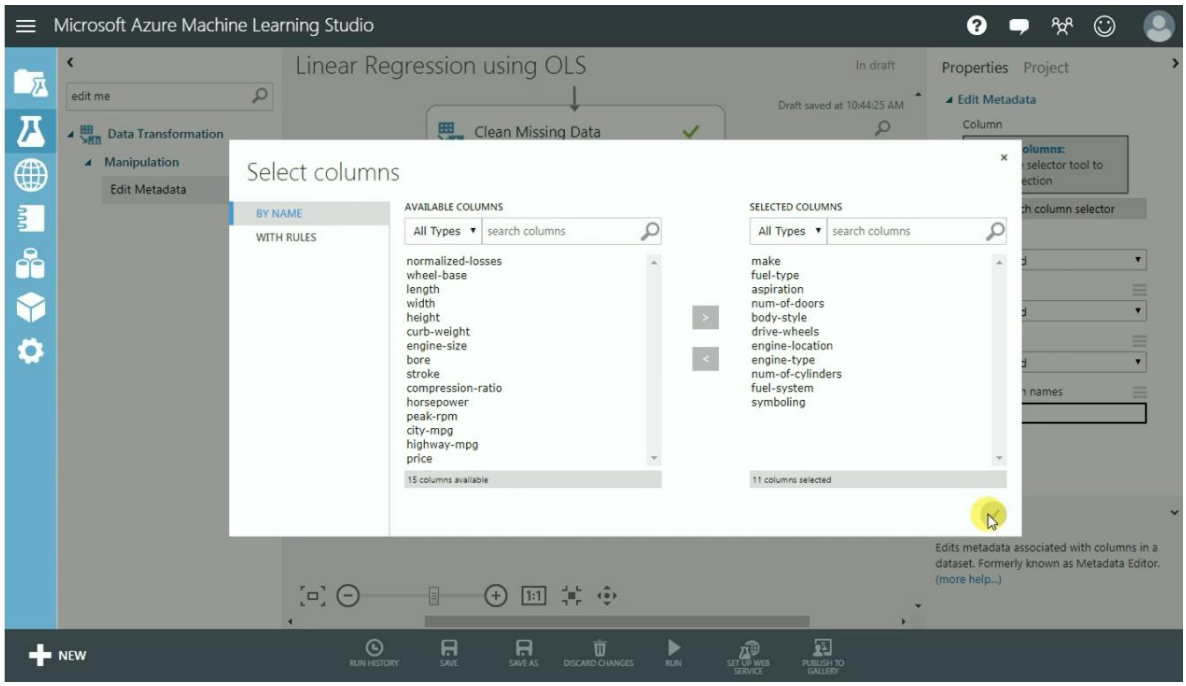
Run the same and visualise if any missing value exists



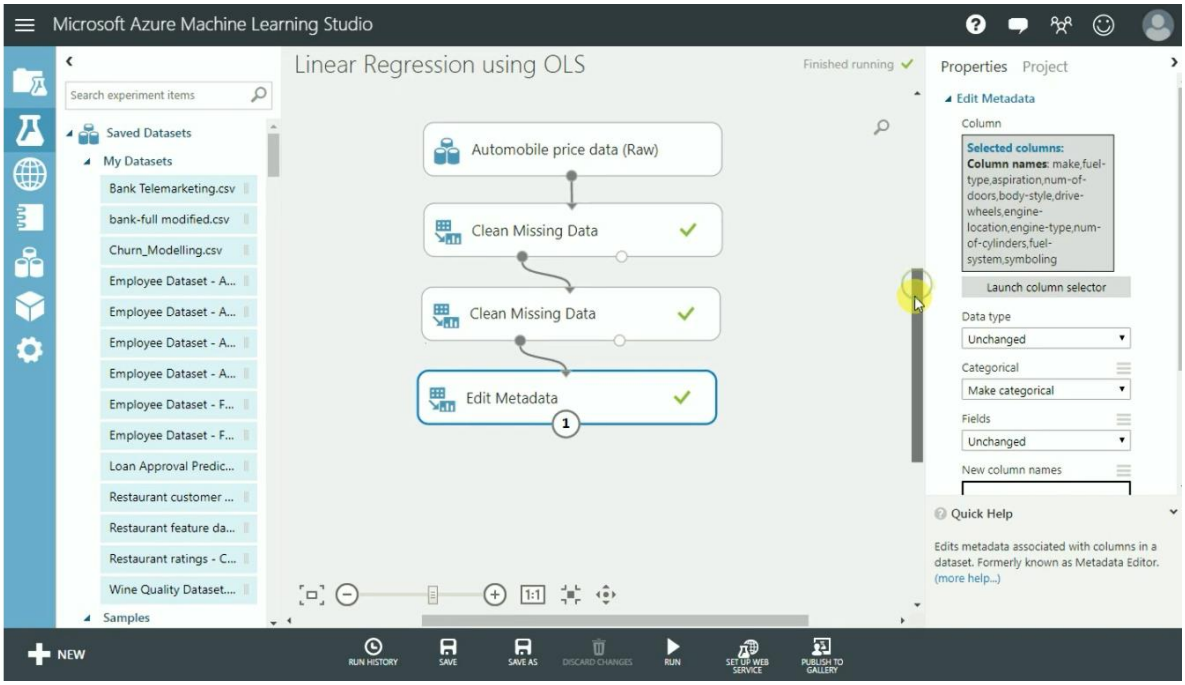
Add metadata and connect the nodes as below



Now launch column selector and select string, include symbolling and click ok

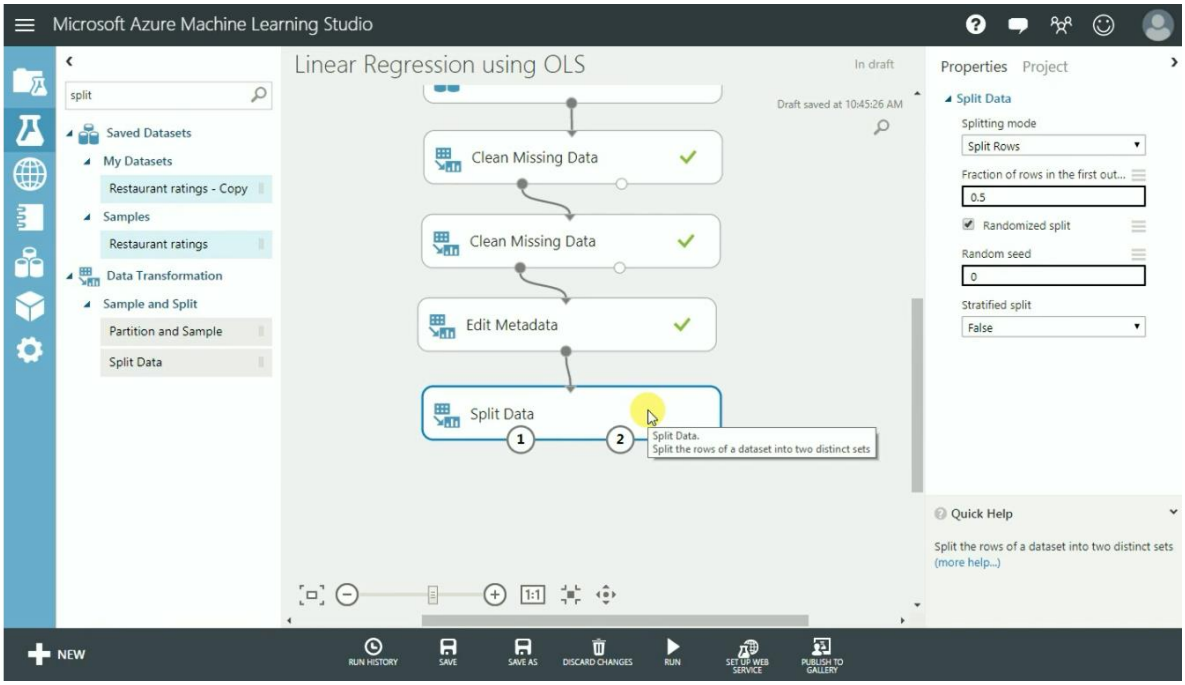


Run the module before application of split data

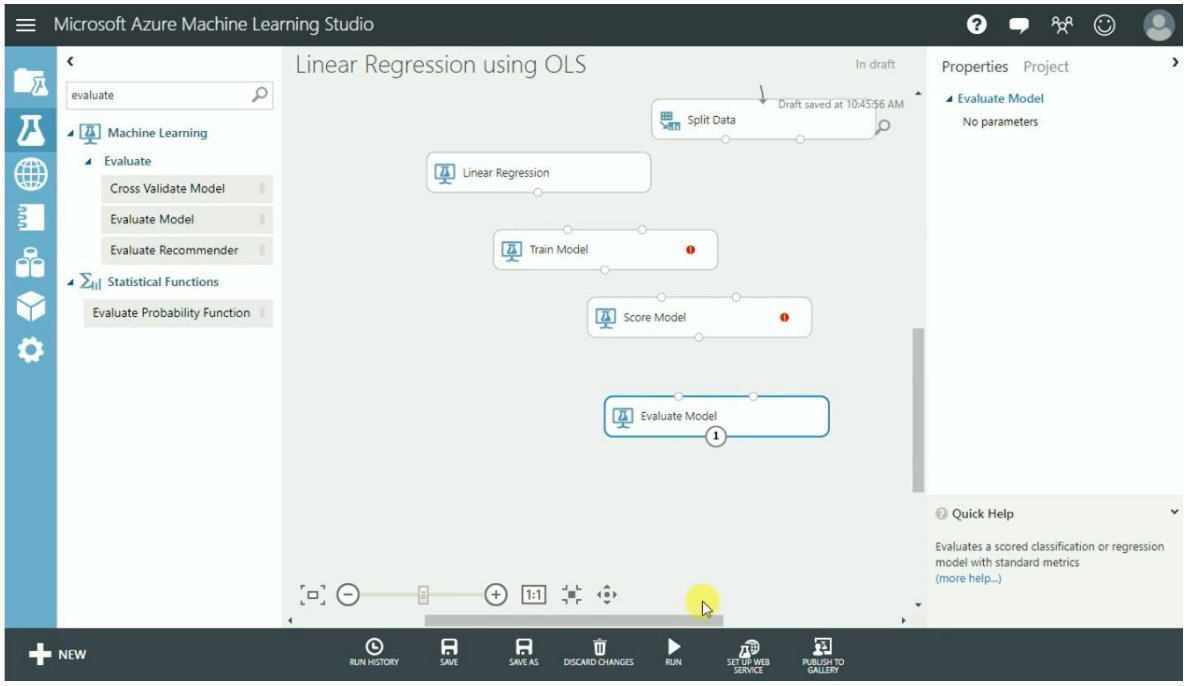


Dataset for Split data

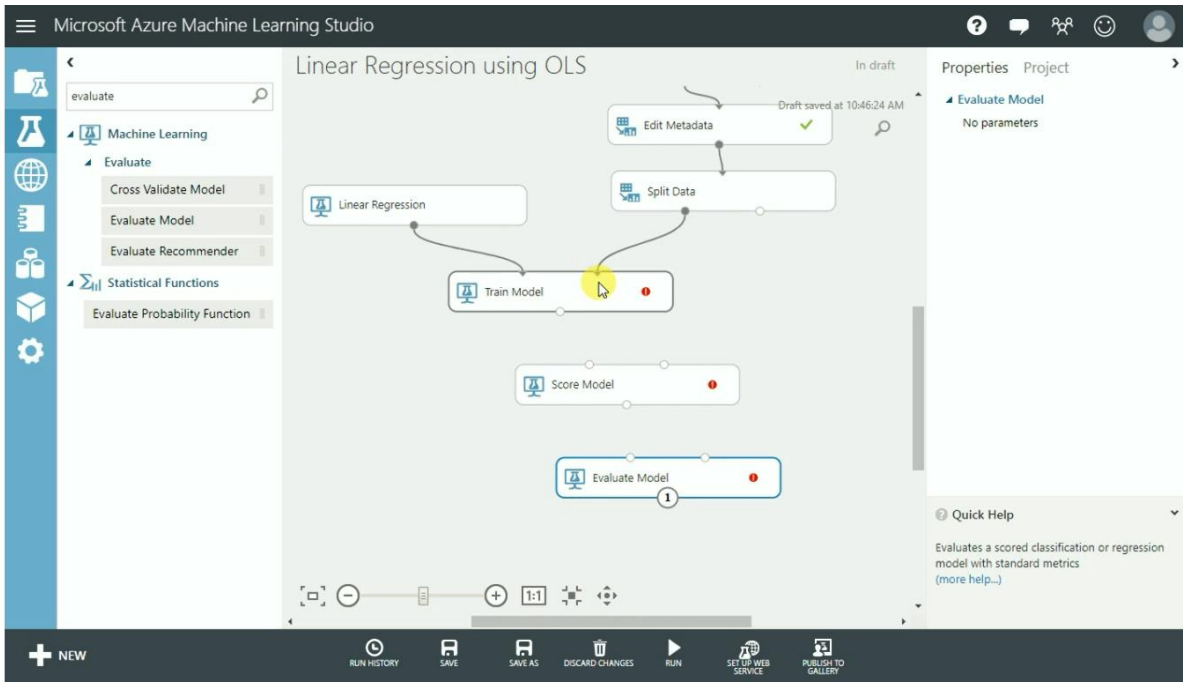
Add split data and connect the nodes



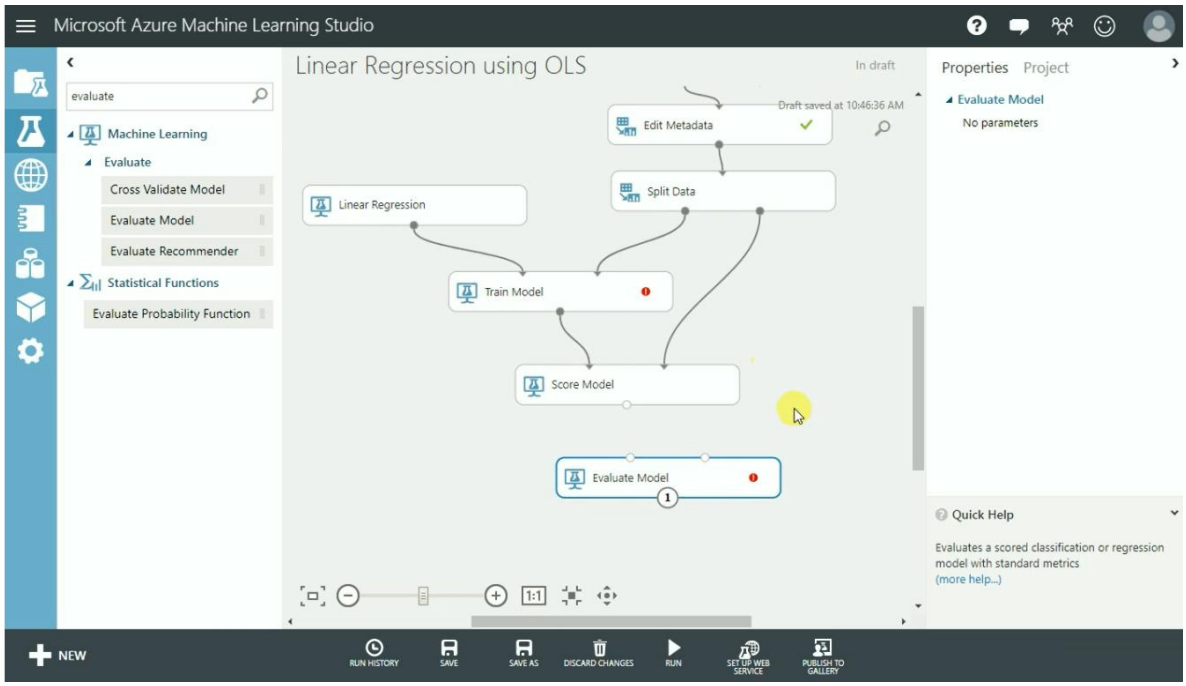
Linear Regression, train model, score model and evaluate model dataset



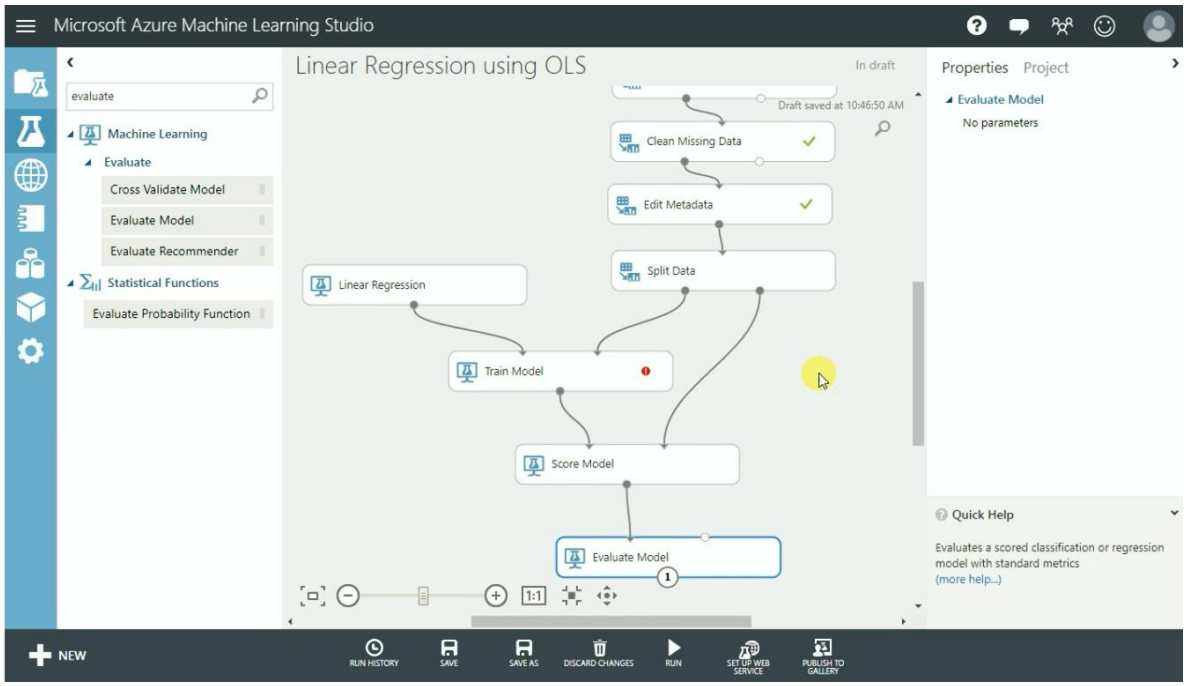
Connect Linear regression node and split data node to train model as shown



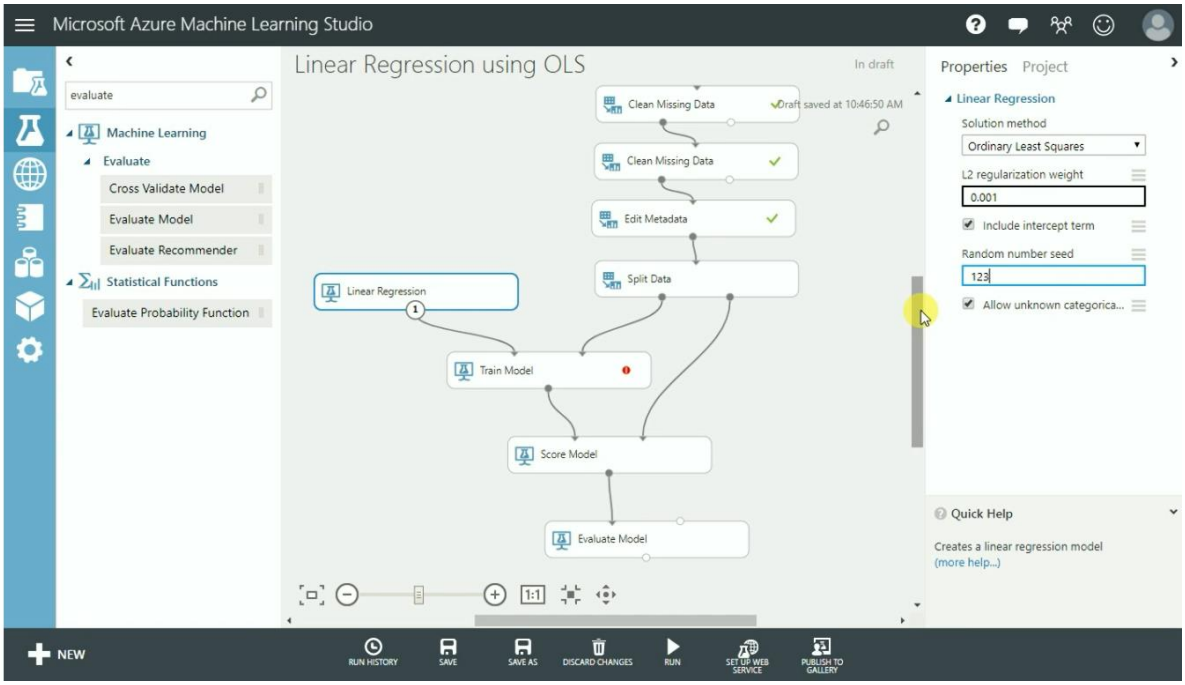
Connect train model node 1 and split data node 2 to score model nodes respectively



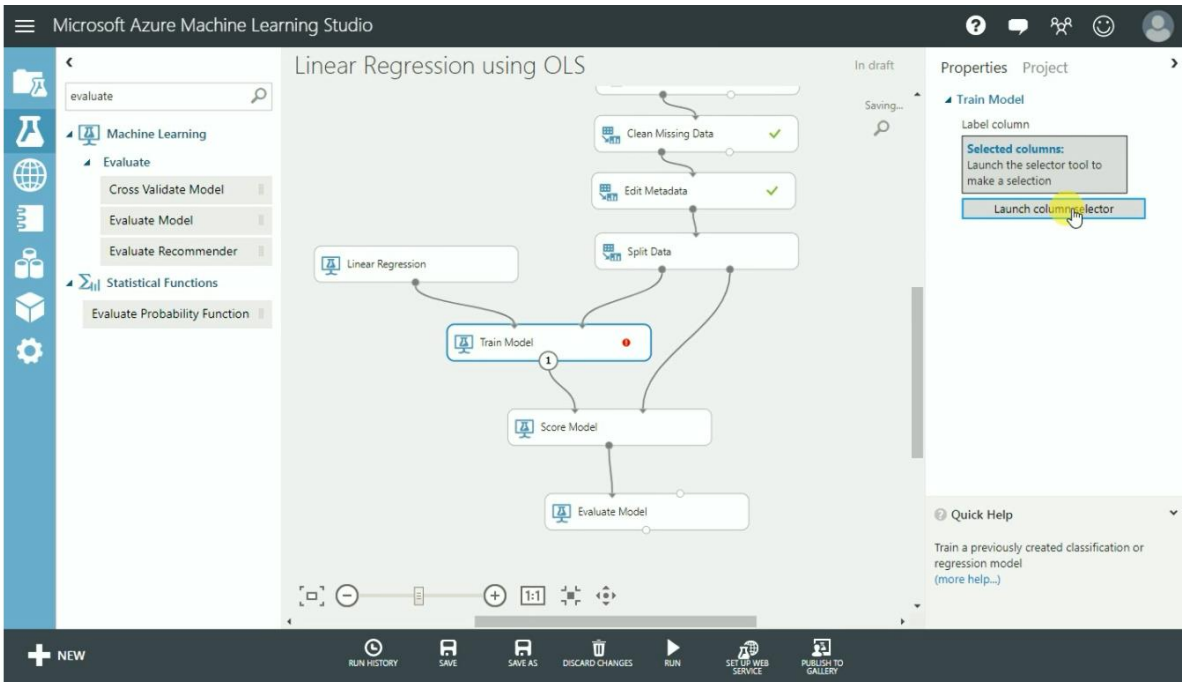
Now connect score model node to evaluate model



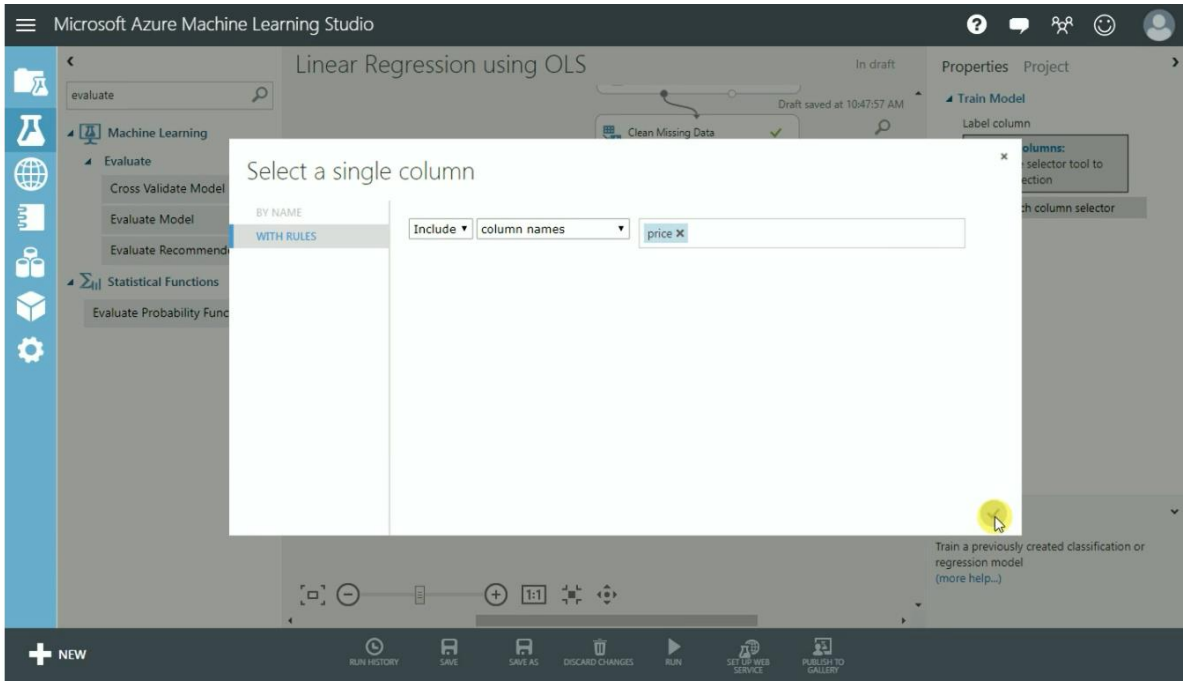
Change the parameters in linear regression as shown



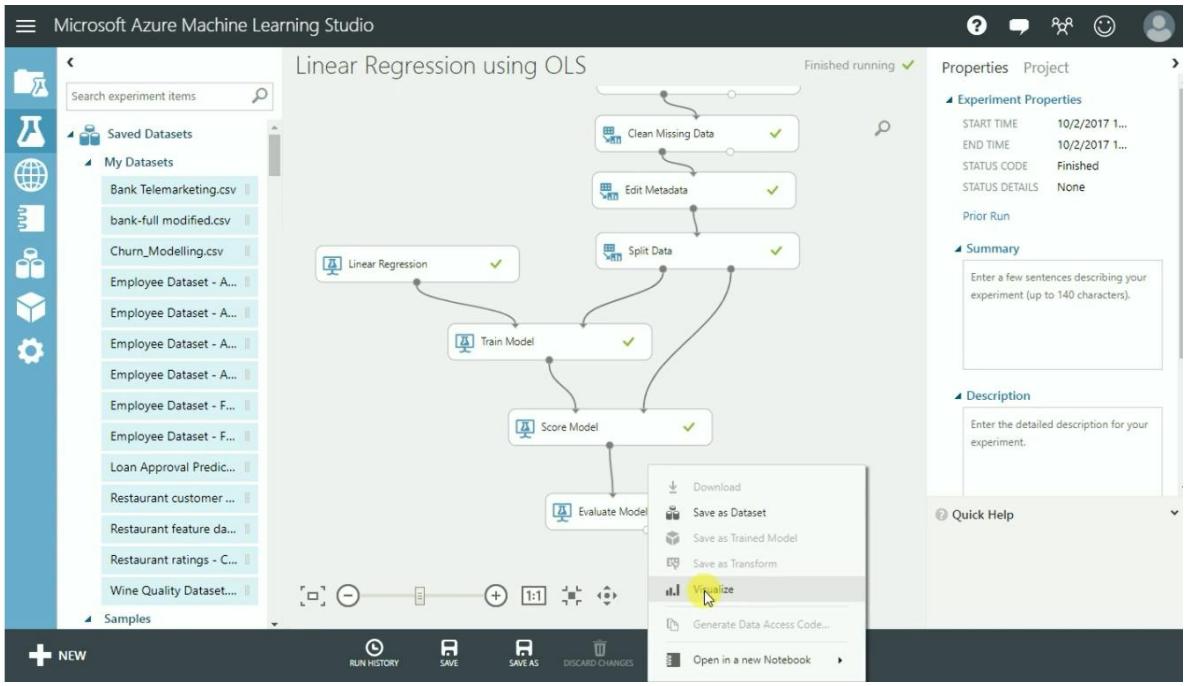
Add label column to train model before running the module



Add price column and click ok



Run and visualize the evaluate model now



Observe the result