create database fuel\_economy; **# Creating DB fuel economy**

use fuel\_economy;

CREATE TABLE `fuel\_economy`.`fe2010` ( **#Creating table fe2010**

id int auto\_increment primary key,

`EngDispl` DECIMAL(2,1) NOT NULL,

`NumCyl` INT NOT NULL,

`FE` DECIMAL(6,4) NOT NULL,

`NumGears` INT NOT NULL,

`TransLockup` INT NOT NULL,

`TransCreeperGear` INT NOT NULL,

`IntakeValvePerCyl` INT NOT NULL,

`ExhaustValvesPerCyl` INT NOT NULL,

`VarValveTiming` INT NOT NULL,

`VarValveLift` INT NOT NULL);

ALTER TABLE fe2010 ADD **#Adding the Xvariable value to the table fe2010**

Xvariable decimal(4,3) DEFAULT -4.518 NOT NULL;

ALTER TABLE fe2010 ADD **#Adding the Intercept value to the table fe2010**

Intercept decimal(4,2) DEFAULT 50.55 NOT NULL;

CREATE TABLE `fuel\_economy`.`fe2011` ( **#Creating table fe2011**

id int auto\_increment primary key,

`EngDispl` DECIMAL(2,1) NOT NULL,

`NumCyl` INT NOT NULL,

`FE` DECIMAL(6,4) NOT NULL,

`NumGears` INT NOT NULL,

`TransLockup` INT NOT NULL,

`TransCreeperGear` INT NOT NULL,

`IntakeValvePerCyl` INT NOT NULL,

`ExhaustValvesPerCyl` INT NOT NULL,

`VarValveTiming` INT NOT NULL,

`VarValveLift` INT NOT NULL);

**# Table Data import wizard is used to import the csv files of fe2010 & fe2011 to the tables**

alter table fe2010 add Predictedvalues double;

**# Adding new column in fe2010 for 2011's prediction**

SET SQL\_SAFE\_UPDATES = 0;

update fe2010,fe2011

**#Predicting fe2011's FE using the xvariable and intercept from fe2010 table**

set fe2010.Predictedvalues=fe2010.Intercept+ (fe2010.Xvariable\*fe2011.EngDispl)

where fe2010.id=fe2011.id; **#Prediction column is added to fe2010**

select \* from fe2010; #to view the updated table fe2010

select \* from fe2011; #to view table fe2011