In this assignment students have to make ARIMA model over shampoo sales data and check the MSE between predicted and actual value.

Student can download data in .csv format from the following link:

https://datamarket.com/data/set/22r0/sales-of-shampoo-over-a-three-year-period#!ds =22r0&display=line

Hint:

Following is the command import

packages and data from pandas import

read_csv from pandas import datetime

from matplotlib import pyplot

from   statsmodels.tsa.arima_model

import   ARIMA   from   sklearn.metrics

import   mean_squared_error   def

parser(x):

return datetime.strptime('190'+x, '%Y-%m')

series = read_csv('shampoo-sales.csv', header=0, parse_dates=[0], index_col=0, squeeze=True, date_parser=parser)