

QBUS6840: Tutorial 9 Tasks

In the 2nd task of Week09 tutorial document, we have learnt how to use ARIMA process to fit the time series data.

Now you are required to use ARIMA model to forecast the Shampoo Sales Dataset:

1. Load the dataset in to the computer, and then plot the original data
2. Select a suitable difference order d in order to obtain a stationary data
3. Plot the PACF curve of the differenced data and select a suitable order for AR(p) process
4. Plot the ACF curve of the differenced data and select a suitable order for MA(q) process
5. Use the selected p , d , and q to form an ARIMA(p,d,q) model.
6. Based on the trained ARIMA model, generate the forecasted sequence and then calculate the residual.