Guideline: You must submit (1) Project Report(.pdf) and (2) Programming codes(.pdf) as deliverable.

Project: Air Passenger Forecasting using ARMA

The uploaded dataset(AirPassengers.csv) provides number of monthly passengers of airlines over a period of 12 years (from 1949.01 to 1960.12). Please find the best ARMA model by satisfying the conditions in below.

- Use the first 10 years for estimation and rest of 2 years for *one-step* ahead forecasting.
- Please check the stationarity. If needed, you may need to use a d-th difference of y_t or ARIMA(p, d, q).
- Based on ACF and PACF, suggest at least three candidate models with appropriate description.
- Evaluate the best model in terms of estimation (best fit) and forecasting performance.
- [*Extra 5 Points for Total Score in Class*] Add seasonality into the ARIMA model (Seasonal ARIMA).