Steps in time series analysis

**1. Sourcing and loading**

* Load relevant libraries
* Load the data
* Explore the data

**2. Cleaning, transforming and visualizing**

* Dropping unwanted columns
* Nomenclature
* Type conversions
* Making a predictor variable y
* Getting summary statistics for y
* Plotting y

**3. Modelling**

* Decomposition
  + Trend
  + Seasonality
  + Noise
* Testing for stationarity with KPSS
* Making the data stationary
* The ARIMA Model
  + Make a function to find the MSE of a single ARIMA model
  + Make a function to evaluate the different ARIMA models with different p, d, and q values
* Visualize the results
* Application: Forecasting

**4. Evaluating and concluding**

* What is our conclusion?
* Next steps