Timestamp:

The use of the timestamp is basically to see the data taken are taken at an equal interval or not (which is very important because a missing value/row in a series can change the total inner mathematical logic of the series )

Timestamp is not required in a dataset for a time series forecasting algorithm. But it is required to ensure that the values taken, are taken at equal intervals and missing values are can play a hugely adverse effect on time series.

Types of Data:

1. Time Series - A time series contains data points that increase, decrease or otherwise change in chronological order over a period. It can be discrete or continuous and maybe univariate or multivariate.
2. Cross-Section Data -
3. Panel Data / Longitudinal Data -

Trend - A trend is a pattern that is observed over a period of time and represents the mean rate of change with respect to time. A trend usually shows the tendency of the data to increase or decrease during the long run.

Trend can be detected using **Hosdrick-Prescott Filter.**