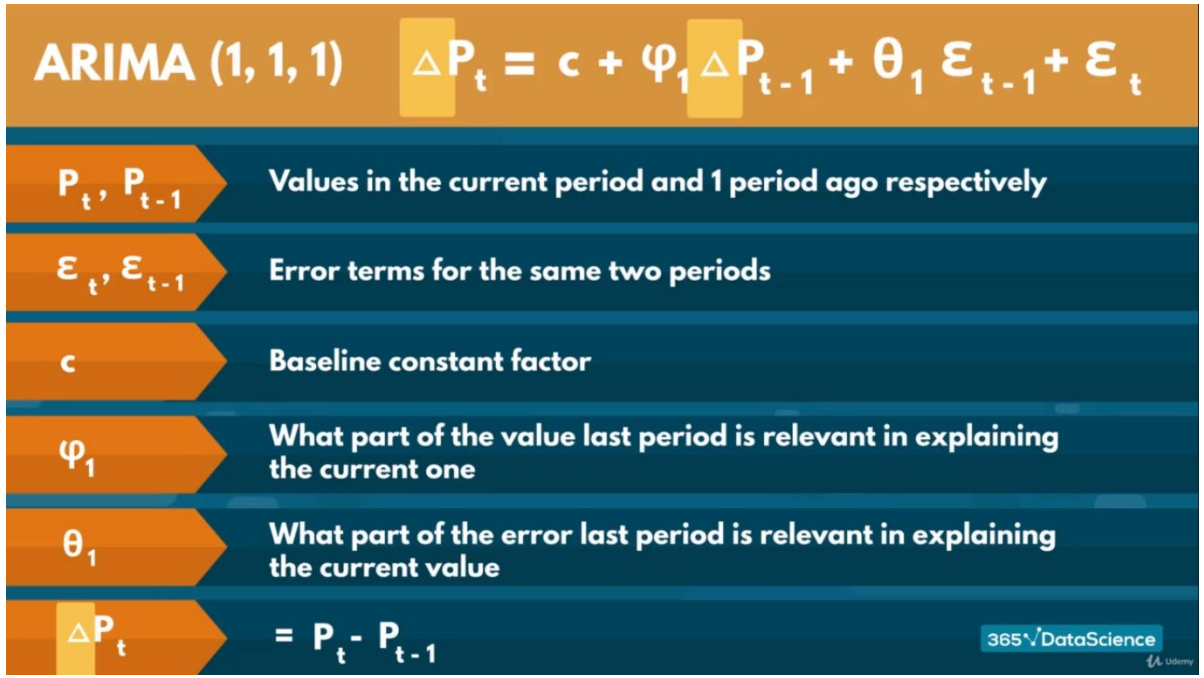
The ARIMA Model

Full Name:

The **A**uto**r**egressive **I**ntegrated **M**oving **A**verage Model

Mathematical Notation:



Description:

The ARIMA is just an integrated version of the ARMA model. What that means is, we simply integrate the data (however many times is needed) to get a stationary set.

Then, we fit a normal ARMA model like we already learned to.

An ARIMA model with 0 degrees of integration is simply an ARMA model, and so any ARIMA (p, 0, q) model is equivalent to an ARMA (p,q).

The order of Integration (d) tells us exactly how many times we need to compute the non-seasonal differences between the values to reach stationarity and including more is discouraged (due to data attrition and interpretability of the results).

The ARIMA Model

Implementation of the Simple Model in Python: