# An End-to-End Project on Time Series Analysis and Forecasting with Python



[Time series](https://en.wikipedia.org/wiki/Time_series) analysis comprises methods for analyzing time series data in order to extract meaningful statistics and other characteristics of the data. Time series forecasting is the use of a model to predict future values based on previously observed values.

Time series are widely used for non-stationary data, like economic, weather, stock price, and retail sales in this post. We will demonstrate different approaches for forecasting opiod deaths drug type wise time series. Let’s get started!

### The Data

data will be available on the this link

<https://www.health.ny.gov/statistics/opioid/>

Steps to project:

**1)import modules**

2)Data Preprocessing

3)Indexing with Time Series Data

**4)** **Visualizing overdose deaths Time Series Data**

5) **Time series forecasting with ARIMA**

6) Fitting the ARIMA model

7) **Validating forecasts**