The question I’m thinking of addressing:

Is it always true that as people’s salary go up and house price will go up as well?

The Data:

* Median usual weekly real earnings: wage and salary workers.
  + Frequency: quarterly
  + <https://fred.stlouisfed.org/series/LES1252881600Q>
  + observation: 1979/01/01 – 2017/01/01
  + Units: CPI adjusted Dollars, Seasonally Adjusted
* U.S National Home Price Index
  + Frequency: Monthly
  + <https://fred.stlouisfed.org/series/CSUSHPINSA>
  + observation: 1975/01/01 – 2017/02/01
  + Units: Index Jan 2000 = 100,Not seasonally adjusted
* Real Gross Domestic Product
  + Frequency: Quarterly
  + <https://fred.stlouisfed.org/series/A191RO1Q156NBEA>
  + observation: 1948/01/01 – 2017/01/01
  + Units: Percent change from quarter one year ago
  + Seasonally Adjusted

Steps of analysis:

* Data mining raw data
* AC&ACF
* ARIMA/AR/MA/ARMA
* Plots and charts
* Spectral analysis
* Time series forecast

References:

<https://fredblog.stlouisfed.org/2015/12/have-earnings-kept-up-with-growth/?utm_source=series_page&utm_medium=related_content&utm_term=related_resources&utm_campaign=fredblog>