

# 506 Group Project Suggestion

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The following three topics together might make a nice self-contained project, that could be done in 3 languages.

## **Representing Time Series Data**

## **Plotting Time Series Data**

## **Computing a Moving Average**

These three topics are covered using the `zoo` package in R in Sections 14.1, 14.2, and 14.10 of the R Cookbook by Paul Teetor. The `zoo` package creates `zoo` objects with nice functionality, better than `ts` classes in base R.

Presumably the three topics could also be done in base R using `ts` objects. I think that is what they do here: <https://a-little-book-of-r-for-time-series.readthedocs.io/en/latest/>

Here are many data sets on time series.

<https://datamarket.com/data/list/?q=provider:tsdl>

These three topics could be done in Python and Stata. Or, perhaps in `zoo`, base R, and Python. The R cookbook is straightforward, so the `zoo` package would be easiest. The other link may be useful for base R.