

Economics 8861.01  
**Assignment 1**  
Professor Sanjay Chugh  
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Provide in a single document two easy-to-understand, well-labeled graphs:

1. A time-series plot of the level of quarterly U.S. real GDP during the period 1947:Q1 – 1996:Q4, along with its Hodrick-Prescott (HP) filtered trend. Perform the filtering and generate the graphs in Matlab.
2. A time-series plot of the HP-filtered cyclical fluctuations during this period (expressed as percentage deviation from the HP trend).

In your brief submission (which should be submitted by email as a PDF):

1. Include a short description of the source data (no need to report the actual tables of numbers in your submission), and how you treated the data when conducting the HP filtering. (**Hint: a very useful place to find a wealth of macroeconomic data is the FRED (Federal Reserve Economic Data) database: <http://research.stlouisfed.org/fred2/>**).
2. Briefly compare your results with Table 1 in King and Rebelo's chapter in the 1999 *Handbook of Macroeconomics*.