Applied Econometrics
Assignment I
Due date: May 22, 2009, 12:00 (To be submitted to Mr. Xu and Ms. Ru)

The data set on website of the course (gdp.xls) contains information on yearly GDP of Country XYZ. Using TSP software find the following:

1. Plot the data with respect to time scale and comment on its pattern. What kind of mathematical model fits to the data best (linear, non-linear etc.)?
2. Calculate the correlation coefficient and comment on its value.
3. Fit a simple linear regression model and write the model. Discuss how much variation in dependent variable is explained by the independent variable.
4. Argue if a transformed model could be appropriate for the data set to fit a linear regression model on transformed data. If so, fit a linear model to the transformed data set. Discuss how much variation in endogeneous variable is explained by the exogeneous variable.
5. Compare the models fitted in parts (3) and (4).

Instructions:
1. A group of 2 students will submit one set of HW.
2. Calculations have to be made by TSP.
3. Do not attach the whole output, only the parts to be interpreted.
4. Interpretations should be clearly typed on the outputs.
5. Late submissions will not be accepted. No makeup assignment will be given.