1. Distinguish the data patterns from a stationary and unit root model with (i) no deterministic terms (ii) drift, (iii) trend, and (iv) structural break, respectively.

2. What are the consequences for misspecifying the deterministic term in the ADF-test?

3. Run the ADF test for the log-index of MIBTEL, DAX30, FTSE100 and CAC40. Which deterministic term should be included? Interpret the results. What is the model suggested by the ADF test. Repeat the test with different information criterion.

4. Apply the ADF test again by least square regression and use the critical values suggested by MacKinnon(1996). Hints: Define the regression equation first.