

Course 27411

Exercises 4/2 2013

1. Complete Lattin exercise 2.2 by the inbuilt matrix calculator in Unscrambler:
 - a. Start the Unscrambler programme
 - b. Import the EDUC_SCORES data from chapter 2 in Lattin et. al (2003) (Hint: Use the file EDUC_SCORES.txt available under File Sharing in Campusnet): 'File' -> 'Import Data' -> 'Ascii'
 - c. Start the help facility – search for correlation and/or covariance
 - d. Go to Contents – go through the points under "Descriptive Statistics" (Click the link under 'Method Reference' and search for 'correlation' in the appearing pdf-document)
 - e. Before using the matrix calculator use the 'Task' -> 'Transform' -> 'Center and scale' to obtain the centered and maybe also the centered AND scaled matrix.
 - f. ALSO Compute the correlation matrix via: (if you didn't do it already)
 - i. ->Task -> Analyze -> Descriptive Statistics.

2. Import the Leslie Salt data from chapter 3 in Lattin et. al (2003).(to be used in Lecture 2)(Use the '.00D' version uploaded in Campusnet – it is an (old) Unscrambler version – to be directly imported)
 - a. Do some univariate explorative analysis (plots, distributions etc) for each variable (Maybe: Start the help facility – go to Contents – go through the points under "Descriptive Statistics")
 - b. Construct the log(price) variable – compare it's distribution with the original variable.
 - c. Mark Price: ->plot –>histogram
 - d. With/without statistics: ->View -> Plot Statistics
 - e. Potentially Normal probability plot
 - f. Change PRICE into LOGPRICE: Mark PRICE column ->Taks->Transform->Compute General: "V8=log(V8)" (Change name into LOGPRICE)
 - g. Investigate (plotting,correlation,regression) the relationships between the log(price) and the other variables one at a time. (Use 2D scatterplots with "statistics")
 - h. Try to compute correlation matrix.