

Exercises, STK4040, week 39

September 21, 2007

- 1 Do exercise 8.2.5 in the book
- 2 Principal component analysis

The file `dataset_39.txt` contains a data matrix with 20 variables and 16 observations.

The file can be read into R with `X <- as.matrix(read.table("dataset_39.txt"))`. (For users of other programs: the file is a tab separated text file. The first row contains the variable names (in "s"), and the first column contains the observation names (also in "s").)

Perform a principal component analysis (R: `prcomp()`) on the data set. Look at the Eigenvalues, plot scores and loadings, and interpret what you see. (E.g., are there any dominant components? can you see any structure? are there any important variables? correlations?)