

## 9th exercises for SIM'2018

### Ex. 1

Download the datafile `Iris.dat` from the course webpage. Perform the LDA transform to the data. Plot the two most important new variables, as in the Fig. 6.8 in the lecture notes. Note that the coordinate axis can be mirrored in different LDA (or eigenvalue decomposition, to be exact) implementations.

### Ex. 2

Use probabilistic classifier and classify observation  $x = (-0.5, -0.25)$  using the two first variables of the LDA-transformed Iris data from Ex. 1. If you did not complete Ex. 1, then use sepal and pedal lengths from the original Iris data and classify observation  $x = (6, 3)$ .