Report 1, deadline see Canvas

Exercise 1 (1-2 pages in total)

general: describe what you learned, and relate to formulas in the lecture notes

it is not necessary to fill the table by hand.

interpret the results from

lmdemoiseed()

lmdemoiseed(step=0.01)

lmdemorange()

lmdemorange(range=2,step=0.1)

lmdemorange(range=2,step=0.1,sigma=1)

lmdemosigma()

for each of these, draw only a short conclusion (1-2 lines). there is **no need to copy** all the tables or figures.

Compare the following simulations

olmdemo1 <- lmdemo(range=29)

olmdemo2 <- lmdemo(range=29,step=29,nrep=15)

comment and discuss the results and relate them to the lecture notes, in particular Example 2.3 on **p.17**. Collate the sum1 and sum2 results in these two cases (four designs in total) in a table and draw a conclusion.

Exercise 2 (at most 1 page)

parcorrtdemo(lellipse=T,iseed=12345)

The ellipse that is drawn corresponds to the 90% confidence region of the best simulation outcome (as determined in the loop).

In addition, the logical *lellipse* is used to draw theoretical results of the histograms in Fig.2.8.B-F. What are the underlying theoretical distributions of the histograms? Relate the scatterplot and all five histograms to equations in the lecture notes. Comment on the outcome(s) that you consider most informative.

Exercise 3 (1 page)

general: describe what you learned, and relate to formulas in the lecture notes

Exercise 4: Fitting unknown simulated data (from *2014toets.zip*)
Report: 1 graphic, 1 summary, the formula of your model and about 5-10 lines.

Load the downloaded workspace ***Modelling.RData*** which contains the object and functions for this assignment. An object **osim2014** has been simulated using an unknown model function. Plot this object and then figure out what is the most appropriate model to describe these observations. Use as argument **datamlm=osim2014.**

Give the formula of your model. Include the graphic of your best fit in the report.

Describe your reasoning in about 5-10 lines.

Exercise 5:

powerfitplot()
powerfitplotomit(select=c(1:4))
powerfitplotomit(select=c(1:3))

discuss and interpret the differences between these three models. which of them do you prefer, and why? **Report: about 5-10 lines**

An assignment has been made in Canvas