

Lab Assignment - 8

Instructor: Dr. Arabin Kumar Dey

1 Due date:

- 15/10/2014.

2 Notes:

- Make a proper documentation preferably in latex or using some other software and submit the printout of the report in .pdf form.
- Each student needs to write his/ her own solutions, even though discussions of the assignments between students are encouraged.

3 Assignments:

1. Consider the data set “FRWRD.txt” containing values in US \$ of the 36 Henry Hub natural gas forward contracts traded on March 23rd 1998. Use different cross validation technique to choose best polynomial (from degree 3, 6 and 8) for fitting the data. Use 1 to 36 as explanatory variable for the sake of simplicity.
2. Use the dataset ”longley” from R data sets. This is a data frame with 7 economical variables, observed yearly from 1947 to 1962 (n=16). Perform multiple regression to see how number of people employed depends on other six variables mentioned in the

data set. Find out the leverage points, influential points, outliers (if any) and the best fitted model.