

MAT013 - Example Sheet

SAS: Chapter 1 + 2

1. Create a library entitled mat008 (save this in a suitable location, perhaps your h: drive).
2. Create the data set first_data_set from the notes and export to csv.
3. Download the files [JJJ.csv](#) and [MMM.csv](#) import the files to your mat008 library.
4. Print the MMM and JJJ data sets using a print procedure.
5. View the contents of the MMM and JJJ data sets using a contents procedure.
6. Sort the MMM and JJJ by age. Separately sort the data sets by postcode.
7. Obtain the mean age, height in metres and weight in kg for the observations of the MMM and JJJ datasets.
8. Obtain the mean age, height in metres and weight in kg for the observations of the MMM and JJJ datasets compartmentalising your output by sex (you'll need to use a by statement).
9. Create a new data set called summary_of_mmm and summary_of_jjj that will contain the mean life_savings_in_pounds by sex for observations in the MMM and JJJ dataset (you'll need to use an output statement).
10. Download the file [math_tests.csv](#) import it in to SAS and output a frequency table of teachers against pass_fail.
11. Obtain (2) separate correlation tables for all the numerical values in JJJ and MMM.
12. Obtain various univariate statistics for the variables savings_in_pounds and random_number for the data sets JJJ and MMM.
13. Do a regression analysis of the variable height_in_metres against weight_in_kg and savings_in_pounds for the data sets JJJ and MMM (do this two ways).
14. Download the data set [math_tests.csv](#) and run an ANOVA test to see if the grades depends on the professor (do this two ways).
15. Obtain a histogram for the variables weight_in_kg for the data sets JJJ and MMM.
16. Obtain a scatter plot of weight_in_kg against height_in_metres for the data sets JJJ and MMM.
17. Output all of the above to a pdf file.

The relevant data can be found [here](#):

- [JJJ.csv](#)
- [MMM.csv](#)
- [math_tests.csv](#)
- [math.csv](#)