

# 1 MAT013 - Example Sheet

## 1.1 SAS: Chapter 4

1. Create a (single) data set containing the name of the observations from “JJJ” and “MMM” as well as a new variable which is “Y” if the individual is clinically obese and “N” otherwise.
2. Create a (single) data set containing the total number of birthday candles used throughout the lives of every individual from both “JJJ” and “MMM”.
3. Obtain the first even numbers less than 240.
4. Create a macro that outputs a scatter plot of height against weight for observations in the “JJJ” and “MMM” data sets? Modify the macro so that it outputs the plot to a pdf file.
5. Create a macro that computes the left over life savings after a given quantity of spending on a given quantity of shopping trips from the “JJJ” data set.
6. Modify the above macro so that a default value is given to spend of 430 and a default value of 3 trips.
7. Use the ‘%let’ statement to pass a value to the above macro.
8. Use the ‘%put’ statement to show all the local and global variables.
9. Modify the above macro so that two different data sets are created depending on whether or not spend is positive or negative. Output a message to the log if the spend is 0.
10. Create a macro that creates 15 data sets each with updated savings in pounds for observations in the “JJJ” and “MMM” data sets for varying values for the number of trips (1 to 15).
11. Download the files “[File\\_1.csv](#) - [File\\_200.csv](#)” and create a function that automatically imports them.

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

- [Files\\_1-200.zip](#)