**Data programming with SAS: Assignment 1**

Using a libname statement, create a library for assignments called assign. Run the SAS program Assignment1.sas. This program will create a permanent dataset in your library assign.

This dataset is an extract of data from a dietary intervention study. Measurements were taken on individuals at the start of the study. They then altered their diet for six months and measurements were repeated at the end of the study. The dataset contains the following variables:

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| **Participant\_ID** | This is the study ID code given to each individual |
| **Age** | This is the age, in years, of the individual at the start of the study |
| **Gender** | Gender is coded 0 for male and 1 for female |
| **Height** | Height of individual in metres |
| **Bodyweight0** | Weight of individual, in Kg, at the start of the study |
| **Energy\_Intake0** | Daily energy intake, in Kcal / Day, at the start of the study |
| **Bodyweight0** | Weight of individual, in Kg, after six months |
| **Energy\_Intake0** | Daily energy intake, in Kcal / Day, after six months |

1. Write a SAS program to create an output report using the following conditions:
   1. Include the variables bodyweight0 and bodyweight6
   2. Restrict to participants between the ages of 40 and 50
   3. Group the report by gender
   4. Suppress the printing of the observation number and use participant\_id to identify observations instead
   5. Assign labels to bodyweight0 and bodyweight6 describing the variables and giving measurement units
2. Write a SAS program to create a new permanent SAS dataset using the following conditions:
   1. Write the dataset to the library assign
   2. Create two new variables, change in bodyweight and proportional change in energy intake from month 0 to 6
   3. Restrict the dataset to individuals over the age of 35 who had a proportional *reduction* in energy intake of more than 0.10. Also remove observations where bodyweight and energy intake data is missing.
   4. Assign permanent labels to describe the new variables
   5. Assign a permanent percentage format to the change in energy intake variable
   6. Create an output report containing only the two new variables, including the labels.