**TU059/TU060/TU256/PhD/Erasmus**

**MATH9102**

**Week One - Lab Instructions**

1. Create a new R Script
2. Copy SECTION ONE from our PSIWeek1.R into this R script to ensure that all the required packages are installed
3. You will be exploring the Mammals Sleep dataset (msleep) from the ggplot2 package (part of tidyverse)
   1. Msleep is a dataset with 83 rows and 11 variables:
   2. Variables:
      1. name: common name
      2. genus
      3. vore: carnivore, omnivore or herbivore?
      4. Order
      5. Conservation: the conservation status of the animal
         1. (cd=critically endangered, en=endangered, lc=least concern, nt=near threatened, vu=vulnerable).
      6. sleep\_total: total amount of sleep, in hours
      7. sleep\_rem: rem sleep, in hours
      8. sleep\_cycle: length of sleep cycle, in hours
      9. awake: amount of time spent awake, in hours
      10. brainwt: brain weight in kilograms
      11. bodywt: body weight in kilograms
4. Tasks
   1. Load the data into a dataframe e.g. msleepdata<-ggplot2::msleep (see SECTION TWO in MATH9102W1.R)
   2. Try out exploring the data using some of the functions covered in SECTION THREE in MATH9102W1.R (names, str, summary)
   3. Try out creating tables using some of the functions covered in SECTION THREE in MATH9102W1.R (table, proportions, gtsummary::tblsummary, flextable)
      1. Potential variables to use genus and vore, vore and conservation e.g. conservation and vore, sleep\_total
   4. Try out the central tendency functions on some of the suitable variables covered in SECTION FOUR in MATH9102W1.R
   5. Try out the dispersion functions on some of the suitable variables covered in SECTION FOUR in MATH9102W1.R