Exercices on session *Getting started with R (2/3)*

RStudio project

- Create a RStudio project to organise the work we will do during the class. Make sure you organise the project in a clear way.
- Create a new script for these exercises (and save it).

Vectors

Let's work on tree aboveground biomass (AGB).

We have 2 different forest plots, each containing 4 trees.

- Create two vectors called AGB1_t and AGB2_t and store the AGB of each of the trees in these plots. Use the following AGB values (in tons).

Plot	Tree1	Tree2	Tree3	Tree4
Plot1	0.10	0.42	0.25	0.3
Plot2	0.24	0.29	0.20	0.3

- Add names to these vectors (for Tree1, Tree2, etc…)
- Create two new vectors that contain the AGB in kg (call them AGB1_kg a,d AGB2_kg)
- Calculate the mean AGB for each of the plots (in tons).
- Calculate the difference between Tree1 in plot 1 and plot 2, Tree2 in plot 1 and plot 2, etc…

Factors

Let's now work on the floristic composition of a plot that has 10 trees of 3 different species.

- Create a vector called *compo* that contains the name of the species of each tree (you can use spA, spB, or the name of you favourite species). Your vector should look like this:

```
[1] "spA" "spB" "spA" "spC" "spA" "spA" "spC" "spB" "spA" "spC"
```

- Transform *compo* to a factor and check that all is ok (number of trees and number of species).
- Add a level for a fourth species
- Count the number of trees per species