**Homework\_01: Exploring doubs dataset with Tidyverse**

**Requirements:**

1. turning your homework before March 29, otherwise reject it

2. Representing the work as R script, i.e. homework\_01.R

3. completing the work step by step as follows, don’t skip any one

The **doubs**dataset is a built-in dataset in the **ade4** package. This data set gives environmental variables (env), fish species (fish) and spatial coordinates (xy) for 30 sites.

1. Loading libraries of **tidyverse** and **ade4**, as well as the **doubs** data into R, and checking what the data looks like and the class of the data.

代码

2. For the env, turning the row names into a column called **site**, then convert the data frame to a **tibble**, named it env\_tb.

代码

3. Concatenating several steps with **%>%** pipe, and name the final variable as env\_final.

* 1. One of the columns is **dfs**. It indicates the distance from sources. **Extract and remain the data of the dfs with more than 1000 km.**
  2. Only interested in these columns: **site, dfs, slo, flo, pH, nit, oxy**.**Select these columns for further analysis.**
  3. Some column names are not intuitive.**Rename** them as follows: **dfs to distsour, slo to slope, flo to flowrate, nit to nitrogen, oxy to oxygen.**
  4. Order the data. **Arrange the data first by slope in ascending order, and then by pH in descending order.**

代码