STATISTICS (BF) 2023/24
DODATNO: Lab Practicals 13

1. Use the built-in R data set named PlantGrowth. It contains the weight of plants obtained under a control and two different treatment conditions. With One-way ANOVA check if there is a difference of weight between the different treatment conditions.

2. You will use the poison dataset to implement the one-way ANOVA test. The dataset contains 48 rows and 3 variables:

   - Time: Survival time of the animal
   - poison: Type of poison used: factor level: 1,2 and 3
   - treat: Type of treatment used: factor level: 1,2 and 3

   Before you start to compute the ANOVA test, you need to prepare the data as follow:

   - Step 1: Import the data
   - Step 2: Remove unnecessary variable
   - Step 3: Convert the variable poison as ordered level

   Use the following code for first three steps:

   library(dplyr)
   PATH <- "https://raw.githubusercontent.com/guru99-edu/R-Programming/master/poisons.csv"
   df <- read.csv(PATH) select(-X) mutate(poison = factor(poison, ordered = TRUE))
   glimpse(df)

   Our objective is to test the following assumption:

   H0: There is no difference in survival time average between group
   H1: The survival time average is different for at least one group.

   Use One-way ANOVA to check the above hypothesis.