**MT5000 Data Analytics & Visualisations**

**Instructions for the Assignment 3 – R Markdown Report**

**Context**

Thanks to the submission of your report made with Jamovi, you have successfully helped Ireland to stop the COVID-19 pandemic. The National Public Health Emergency Team (NPHET) wants to keep your report in an electronic format at the National Library of Ireland to reproduce it again with new data if a new pandemic hits. Unfortunately, the current .pdf format is not reproducible and only a .Rmd format (R Markdown) is accepted.

**Task**

Use the document submitted for the assignment 2 to **create the content of a .Rmd academic report**:

* **The text and hypotheses can be an exact copy-paste of the text you have submitted in the assignment 2** which includes a short abstract, a short literature review with no more than 5 references which ends with your hypotheses, a method section presenting your data (but no need to represent the model or to represent the equation), a result section including descriptive statistics and inferential statistics, a discussion and conclusion section which examines the hypotheses and their results, and a reference section listing the academic papers used in your document. It can also be a modified version of the text already submitted but modifications are not required.
* In term of code, in addition to the first setup code chunk that includes your libraries, options and data object creation (with the `read.csv()` function), this .Rmd report have to include:

1. **At least one code chunk containing the code to create a table** with the package {kableExtra}
2. **At least one code chunk containing the code to create a figure** with the function `ggplot()` contained in the package {tidyverse}
3. **At least one code chunk containing the code to test a model with the `lm()` function** (the model has to test the hypotheses previously formulated)

The report should “knit” in an output document (.pdf format or .html format if preferred) without error but **only the .Rmd file will be submitted and assessed**.

**Assessment Criteria**

The assessment criteria are the following:

* **Presence of the following:** abstract, literature review, method section, result section, discussion and conclusion section, and reference section (used in your previous assignment or new)
* **Inclusion of a table relevant to your analysis and created with the package {kableExtra}**
* **Inclusion of a figure relevant to your analysis and created with the function `ggplot()` contained in the package {tidyverse**}
* **The test of a model corresponding to the formulated hypotheses with the `lm()` function**

**Report Submission**

1. **On the MT5000 Loop page, section Assignment.**
2. **A .Rmd file.**
3. **By Sunday May 2nd, 2021.**