

# STA 326 2.0 Programming and Data Analysis with R

## Assignment 2 (10 Marks) - Makeup

### Time-bound examination

**Due date: 14 September 2021, 8.00AM (Sri Lanka Standard Time)**

We will NOT accept assignment submissions beyond this time.

Extensions of time for submission are only allowed for the categories mentioned here:

<https://hellor.netlify.app/2021/week0.html#10>

## Assignment instructions

### Step 1

Install `devtools` package.

### Step 2

Type the following code to get access to the `sta3262` package. This package provides access to the assignment documents

```
library(devtools)
devtools::install_github("thiyanagt/sta3262")
```

### Step 3

Load the `sta3262` using the command

```
library(sta3262)
```

### Step 4

Use the `get_assignment_data` function to get access to your assignment dataset. The function input is your index number.

Example:

```
get_assignment_data("AS2018000") # this displays the dataset
```

### Step 5

Use the `get_assignment_questions` function to get access to your assignment questions. The function input is your index number without "AS".

Write R codes to obtain answers to the questions. Use tidyverse packages and `%>%` operator in your coding. Do not use base R functions for plotting.

Example:

```
get_assignment_questions(2018000)
```

\$q1

[1] "Obtain summary statistics for each variable and interpret the results."

\$q2

[1] "Draw a timeseries plot using the qplot function to visualize changes in Covid-19 death cases over

\$q3

[1] "Draw a scatterplot using the qplot to visualize the relationship between Covid-19 confirmed cases a

\$q4

[1] "In the year 2021, which date has the lowest number of confirmed cases?"

\$q5

[1] "In 2021, which dates are almost the same in the number of Covid-19 confirmed cases?"

\$q6

[1] "Create a new dataframe called "newcovid", that contains rows of only confirmed cases."

## Step 6

Submit the following documents

1. R script file containing the R codes.
2. Upload both R codes and outputs in a PDF file. Please include your index number and e-signature.