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Tp No: 1

Exercise 1 Download the R software (version 4.2.1) for the appropriate operating system by following these steps:

- Go to the Google browser and type R.

- Click on CRAN.

- Click on Download R for Windows.

- Click on Install R for the first time.

- Download R-4.2.1 for Windows.

Exercise 2 :

- Go to your computer's downloads and double-click on the file: `R-4.2.1-win.exe`

- Complete the installation steps for the R software.

- Create a folder on the desktop named: `yourname_yourfirstname`.

- Go to the R4.2.1 shortcut on the desktop and double-click on it.

- Maximize the console to enter scripts.

Creating Variables

(a) Type the following commands in the console and observe the results that appear:

> x = 7

> x = 2,

> x, what do you notice?

> X, read the error message and what do you notice about this message?

> x <- 7

> 7 -> x, draw a conclusion.

> 3variable = 8, read the error message and what do you notice about this message?

> variable3 = 8, what do you notice?

> @variable = 8, read the error message and what do you notice about this message?

> variable@ = 9, read the error message and what do you notice about this message?

> *variable_var* = 8, what do you notice about this message?

> *ls*(), what is the role of this function?

> *rm*(*variable*3)

> variable3, what do you notice? What is the role of this function?

Exercise 3 (a) Type the following commands in the console and observe the results that appear:

```
1)    > x <- 5,                    11) > ls()
2)    > y <- 4                     12) > abs(x)
3)    > x + y                      13) > sqrt(x)
4)    > x - y                      14) > help(sqrt)
5)    > x / y                      15) > exp(1)
6)    > x * y                      16) > exp(x)
7)    > aa <- x + y                17) > log(x)
8)    > bb <- x - y                18) > log2(x)
9)    > cc <- x / y                19) > log10(x)
10)   > dd <- x * y                20) > log(x, base = 2)
                                   21) > help(log)
```

(b) Creating string-type variables:

```
> first_name = "anwar"
> first_name = 'yassin'
> first_name <- "anwar"
> first_name = ' My name is Anwar', read the error message and what do
  you notice about this message? Conclusion?
> first_name = ' My name is Wassim',
> first_name,
```

(c) Creating boolean-type variables (True or False):

> b = true

> b, what do you notice?

> B = TRUE

> What do you notice?

> ls()

(d) Another way to remove a variable:

> rm(list = ls(all = TRUE))

> ls()

> q()

(e) Save your work in the folder `yourname_yourfirstname`.