

Call Function Exercises - Deliverable one

You have to have the following libraries and packages for start the project. For the execution of the project the following packages are needed:

```
# install.packages("nycflights13")
# install.packages("tidyverse")
# install.packages("knitr")
```

In the development of the project the following packages were used for its visualization and environment

```
# install.packages("devtools")
# install.packages("roxygen2")
# install.packages("testthat")
# install.packages("ggplot2")
```

When creating the package in rstudio in connection with github, several core files are generated for its execution and links. We can interact and add files to highlight a better display of the package, mentioned with the installation of the previous packages.

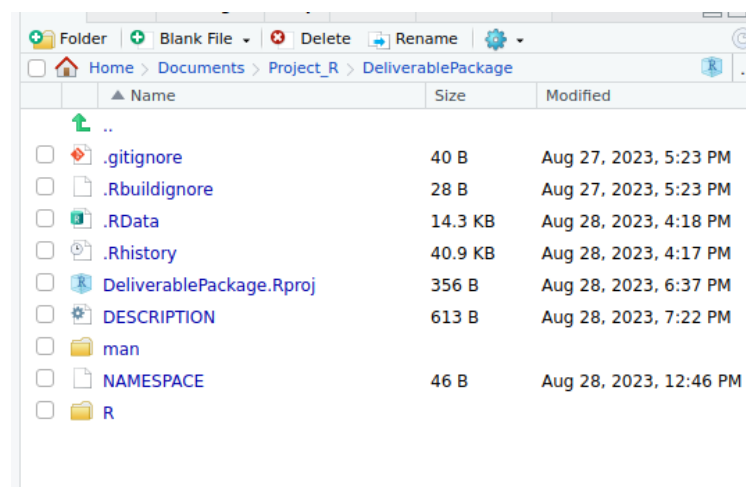


Figure 1: Imagen 1. Files

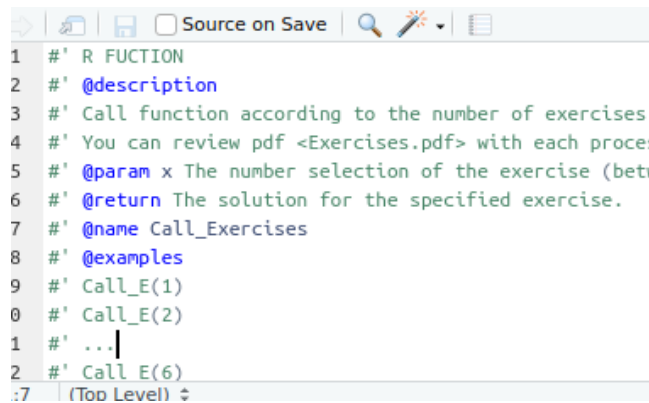
You can customize your package description to the manual generation of your code.

```
1 Package: Manual - Deliverable One
2 Type: Package
3 Title: Deliverable one - Exercise call - Tidyverse
4 Version: 0.1.0
5 Authors: Ricardo Figueroa <ricardo.figueroa@ieee.org>
6 Maintainer: The package maintainer <ricardo.figueroa@i
7 Description: Development of a series of exercises of t
8               programming language in the Rstudio platform, whic
9               solution of each one of these exercises.
0 License: use_mit_license()
1 Encoding: UTF-8
2 LazyData: true
15
```

Figure 2: Imagen 2. Description

which you must complete the information according to the purpose of your code.

Now, which you must complete the information according to the purpose of your code, as shown in the following figure:



```
1 #' R FUCTION
2 #' @description
3 #' Call function according to the number of exercises
4 #' You can review pdf <Exercises.pdf> with each proces
5 #' @param x The number selection of the exercise (betw
6 #' @return The solution for the specified exercise.
7 #' @name Call_Exercises
8 #' @examples
9 #' Call_E(1)
10 #' Call_E(2)
11 #' ...
12 #' Call E(6)
```

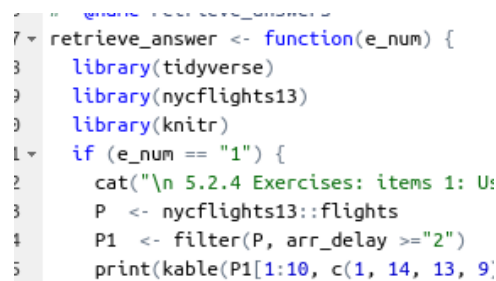
Figure 3: Figure 3. Parameter declaration

Now the following codes are compiled to generate the manual for add roxygen2 in your comments R.files

Important: Before executing the lines of code you must delete the NAMESPACE file

```
# devtools::document()
# devtools::build_manual()
```

- Function interaction:



```
7 retrieve_answer <- function(e_num) {
8   library(tidyverse)
9   library(nycflights13)
10  library(knitr)
11  if (e_num == "1") {
12    cat("\n 5.2.4 Exercises: items 1: U:
13    P <- nycflights13::flights
14    P1 <- filter(P, arr_delay >="2")
15    print(kable(P1[1:10, c(1, 14, 13, 9)
```

Figure 4: Figure 4. call function

Finally, the call of the function was made with added if that fulfilled the condition of the number of the exercise. This must share a variable with the receiver to locate it and make the call, which returns with the indicated value of the exercise that you want to view.