

# UNIVERSIDAD PRIVADA DE TACNA



## FACULTAD DE INGENIERÍA Escuela Profesional de Ingeniería de Sistemas

TITULO:  
Informe de Laboratorio U3–N°01  
“Análisis Exploratorio de Datos con R”

CURSO:  
Inteligencia de Negocios

DOCENTE:  
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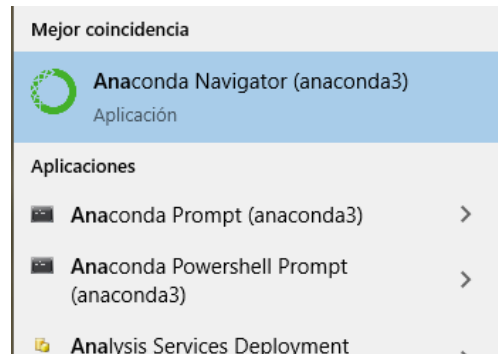
Tacna – Perú  
2021

# **INFORME DE LABORATORIO U3-N°01**

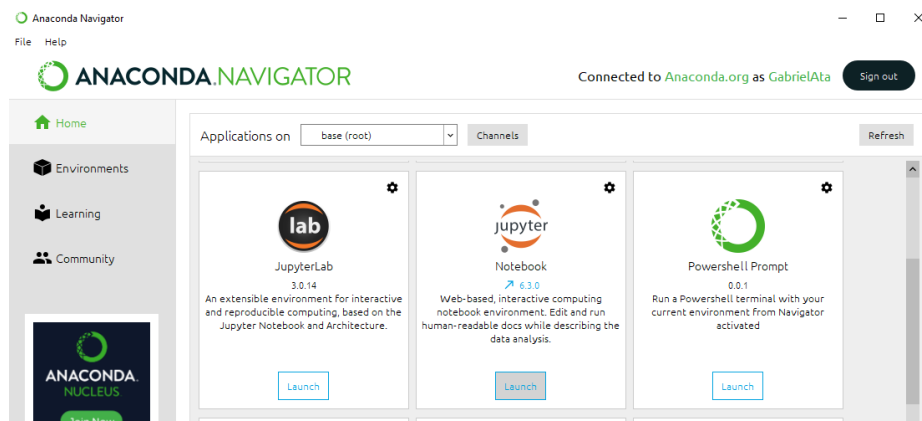
## **TEMA: Análisis Exploratorio de Datos con R**

### **PROCEDIMIENTO.**

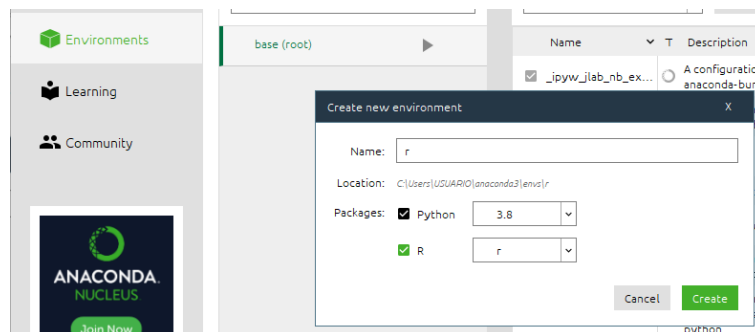
**Paso 01.** Buscamos y abrimos anaconda.



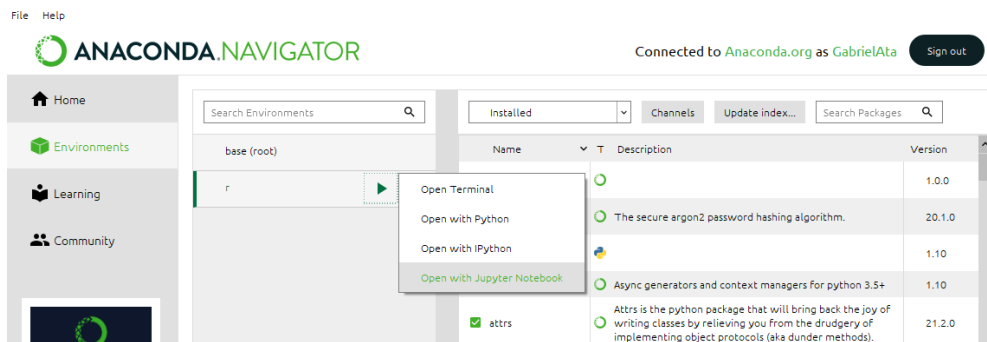
**Paso 02.** Ejecutamos Jupiter.



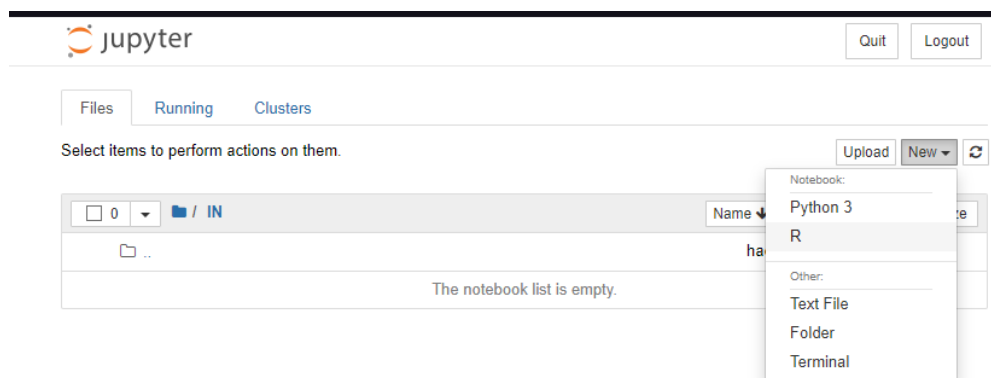
**Paso 03.** Creamos un nuevo ambiente incluyendo R y Python.



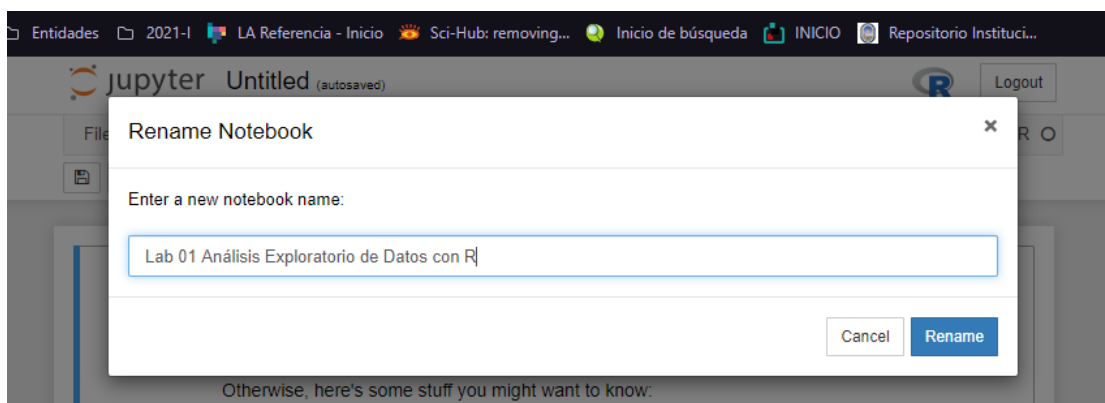
**Paso 04.** Abrimos el entorno con el paquete R usando la opción “Abrir con Jupyter Notebook”.



**Paso 05.** Para crear un nuevo bloc de notas para el idioma R, en el menú Jupyter Notebook, seleccionamos Nuevo, luego seleccionaremos Folder para crear un directorio que pueda separar los archivos y finalmente dentro de la carpeta creada seleccionamos R.



**Paso 06.** Ingresamos un Nombre.



**Paso 07.** Comenzamos a codificar.

## Getting started

Notebooks let you mix code, documentation and graphics. The following cell contains the traditional 'Hello, world' getting. Click it, then execute it by pressing Shift-Enter.

```
In [1]: 1 print("Hello, world!")
```

```
[1] "Hello, world!"
```

We're working in R, so you might want to play with one of the build-in databases.

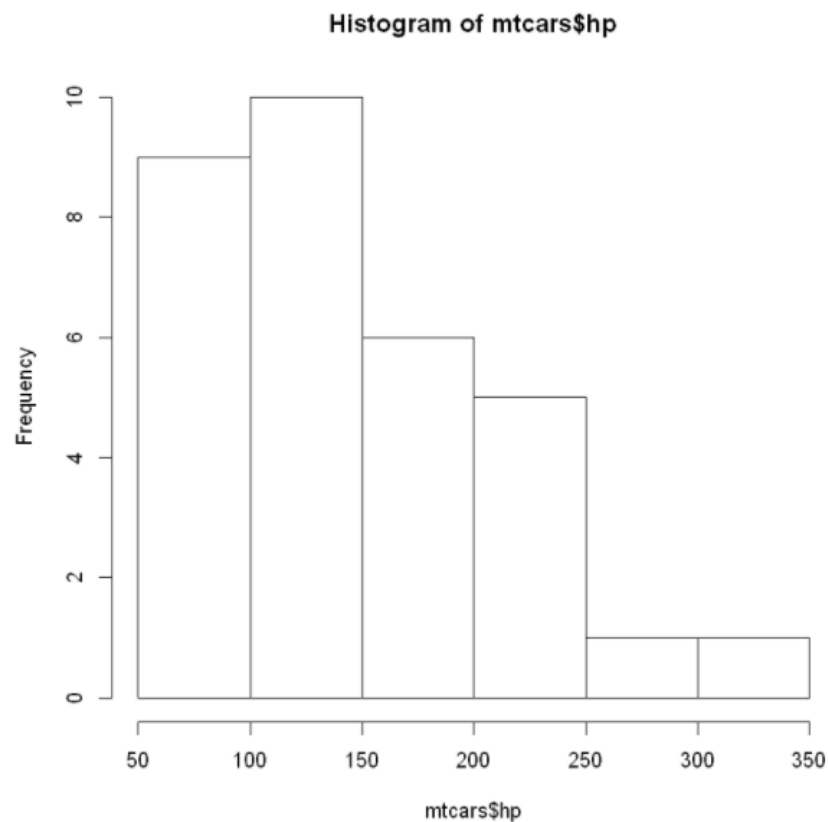
Let's check out mtcars.

```
In [2]: 1 mtcars
```

	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Mazda RX4	21.0	6	160.0	110	3.90	2.620	16.46	0	1	4	4
Mazda RX4 Wag	21.0	6	160.0	110	3.90	2.875	17.02	0	1	4	4
Datsun 710	22.8	4	108.0	93	3.85	2.320	18.61	1	1	4	1
Hornet 4 Drive	21.4	6	258.0	110	3.08	3.215	19.44	1	0	3	1
Hornet Sportabout	18.7	8	360.0	175	3.15	3.440	17.02	0	0	3	2
Valiant	18.1	6	225.0	105	2.76	3.460	20.22	1	0	3	1
Duster 360	14.3	8	360.0	245	3.21	3.570	15.84	0	0	3	4
Merc 240D	24.4	4	146.7	62	3.69	3.190	20.00	1	0	4	2
Merc 230	22.8	4	140.8	95	3.92	3.150	22.90	1	0	4	2

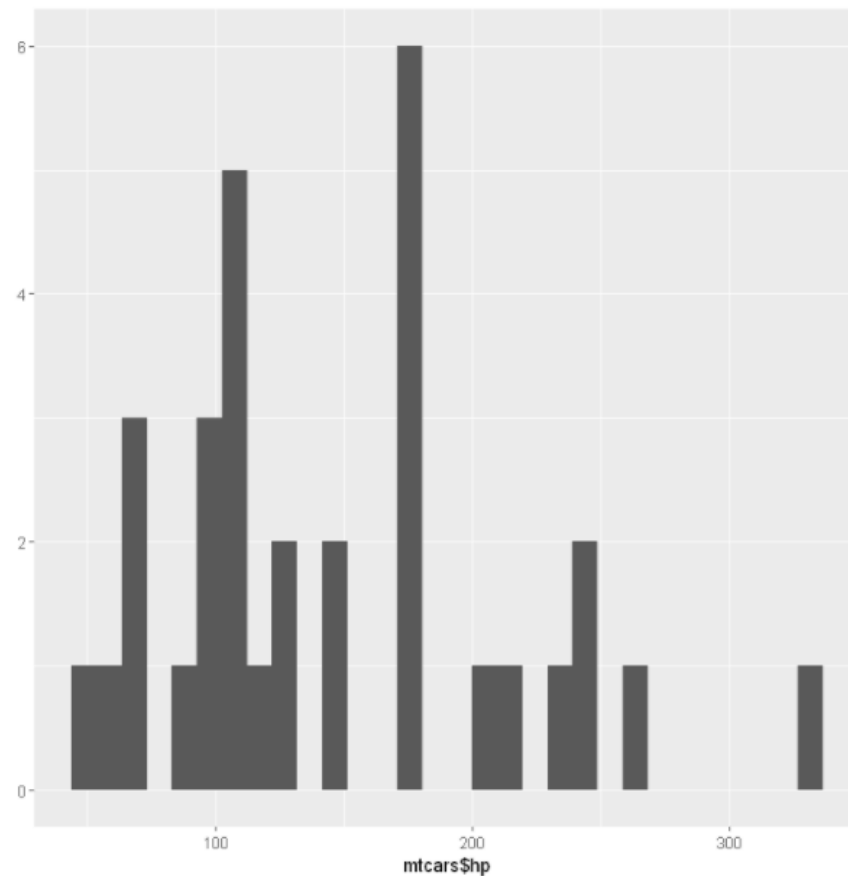
You can plot things:

```
In [4]: 1 hist(mtcars$hp)
```



```
In [5]: 1 library(ggplot2)
        2
        3 qplot(mtcars$hp)
```

``stat_bin()` using `bins = 30`. Pick better value with `binwidth`.`



plotly is another popular graphing library. Let's try it!

```
In [6]: 1 library(plotly)
        2 set.seed(100)
        3 d <- diamonds[sample(nrow(diamonds), 1000), ]
        4 plot_ly(d, x = ~carat, y = ~price, color = ~carat,
        5         size = ~carat, text = ~paste("Clarity: ", carity))
```

Error in library(plotly): there is no package called 'plotly'  
Traceback:

```
1. library(plotly)
```

```
In [3]: 1 library(ggplot2)
        2 ggplot(diamonds, aes(x = carat, y = price, color = clarity)) + geom_point()
```

Registered S3 methods overwritten by 'ggplot2':

method	from
[.quosures	rlang
c.quosures	rlang
print.quosures	rlang

