



**UNIVERSIDAD PRIVADA DE TACNA**

**FACULTAD DE INGENIERIA**

**Escuela Profesional de Ingeniería de Sistemas**

**Lab 01 Análisis Exploratorio de Datos con R**

Curso: Inteligencia de Negocios

Docente: Mag. Ing. Patrick Cuadros Quiroga

Integrantes

*Diego Manuel, Gorbeño Mamani*

*(2018000354)*

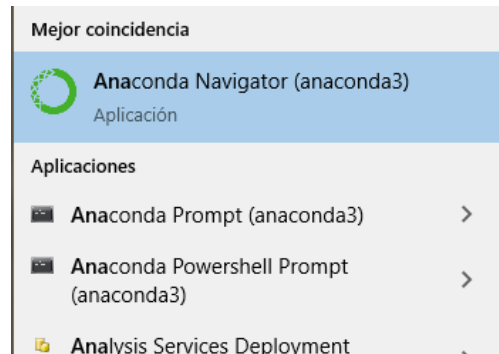
**Tacna – Perú  
2022**

# **INFORME DE LABORATORIO U3–N°01**

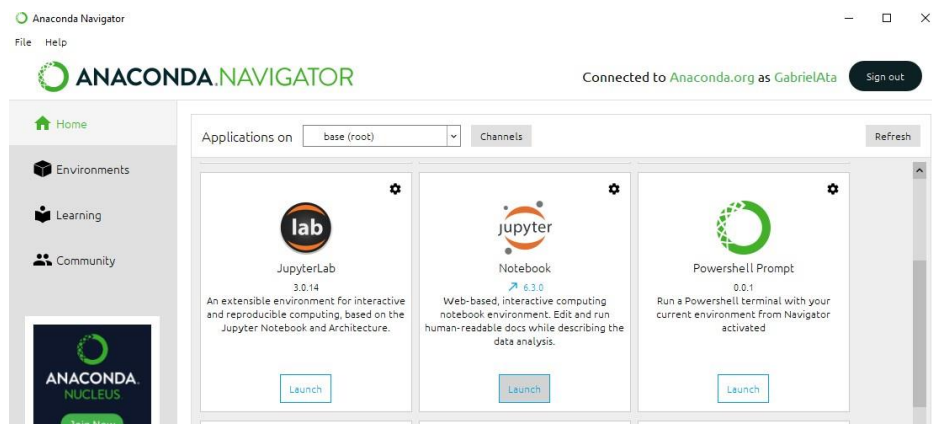
## **TEMA: Análisis Exploratorio de Datos con R**

### **PROCEDIMIENTO.**

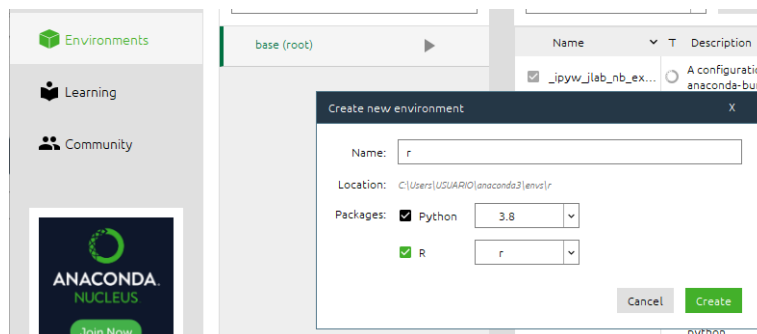
**Paso 01.** Buscamos y abrimos anaconda.



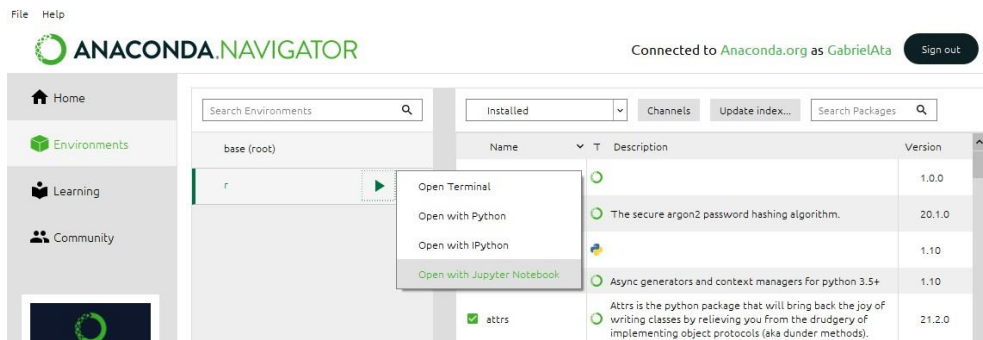
**Paso 02.** Ejecutamos Jupiter.



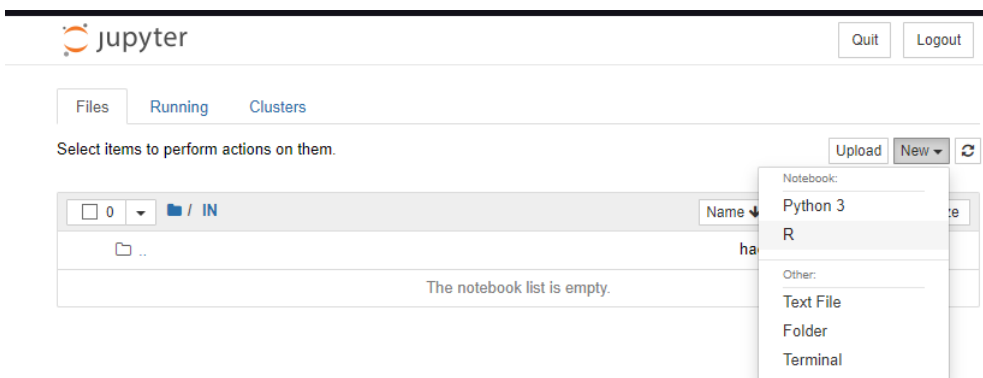
**Paso 03.** Creamos un nuevo ambiente incluyendo R y Python.



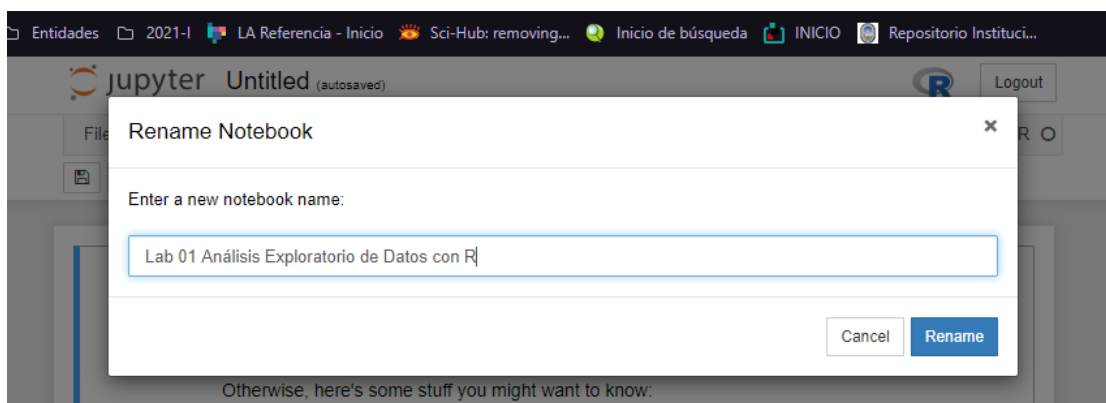
**Paso 04.** Abrimos el entorno con el paquete R usando la opción “Abrir con Jupyter Notebook”.



**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 ShiR-Enter.

```
In [1]: print("Hello, world! ")  
[1] "He11a, world !"
```

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

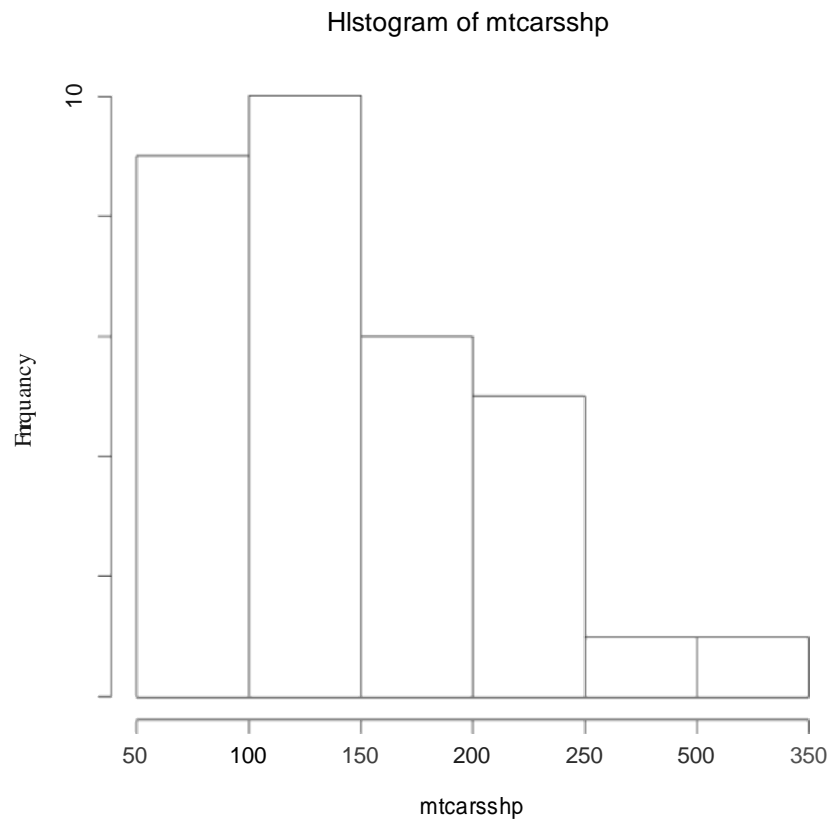
Let's check out mtcars.

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

	mpg	cyl	disp	hp	drat	wt	qsec	as	am	gear	carb
M8zdaRX4	21.0	6	160.0	110	3.90	2.620	16.46	0	1	4	4
M8zd8RX4W0g	21.0	6	160.0	110	3.90	2.875	17.02	0	1	4	4
oatsun710	22.8	4	108.0	93	3.85	2.320	18.61	1	1	4	1
Homet4Drive	21.4	6	256.0	110	3.08	3.215	19.44	1	0	3	1
Homet5portabout	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
Duster360	14.3	8	360.0	245	3.21	3.570	15.84	0	0	3	4
M0rc240D	24.4	4	146.7	62	3.69	3.190	20.00	1	0	4	2
Merc230	22.8	4	140.8	95	3.92	3.150	22.90	1	0	4	2

You can plot things:

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



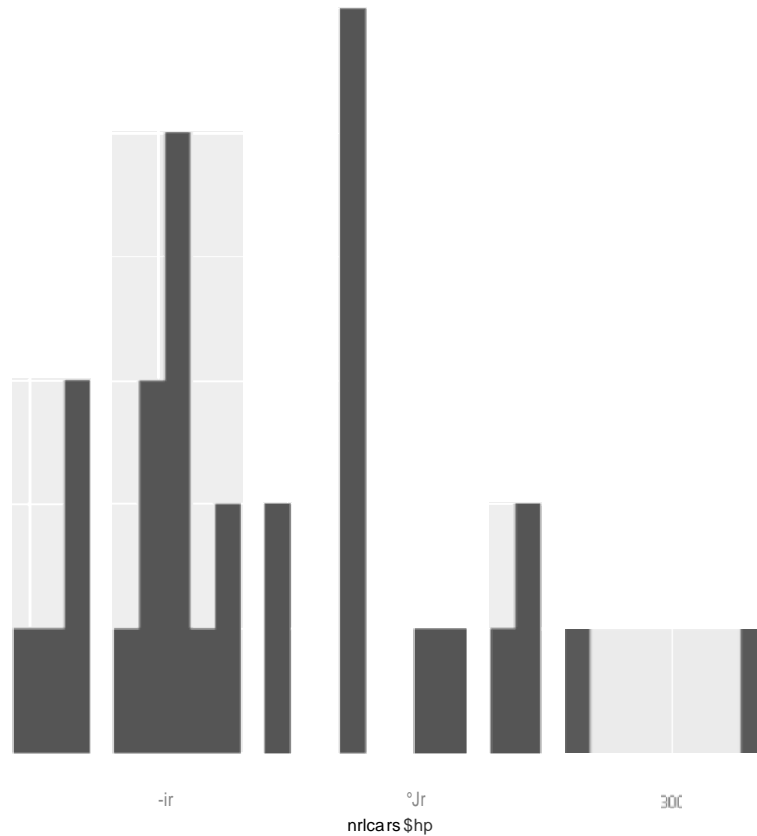
```

Ir 'Sj'      library(ggplot2)

             qplot(ntcars$hp)

             'stat bin()' using 'bins = 30'. Pick better value with 'binwidth'.

```



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

```

Ir 'O]:      library(plotly)
             set.seed(100)
             d <- diamonds[sample(nrow(diamonds), 1000), ]
             plot_ly(d, x = carat, y = price, color = ~carat,
                    size = ~carat, text = paste("Clarity: ", clarity))

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

```

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

Registered S3 methods overwritten by 'ggplot2':

method	from
\$.Quosunes	rlang
c.Quosures	rlang
print.quosures	rlang

