# Reticulate Pokemon

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## Pokemon (Python -> R)

### Limpieza de Datos en Python

```
import pandas as pd
import os
os.environ['KMP_DUPLICATE_LIB_OK']='True'
pokemon = pd.read_csv("/Users/heinerleivagmail.com/Pokemon.csv")
print(pokemon.head())
```

```
##                    Name Type 1  Type 2  Total  HP  Attack  Defense  Sp_Atk  \
## 0             Bulbasaur  Grass  Poison    318  45      49       49      65
## 1               Ivysaur  Grass  Poison    405  60      62       63      80
## 2              Venusaur  Grass  Poison    525  80      82       83     100
## 3  VenusaurMega Venusaur  Grass  Poison    625  80     100      123     122
## 4            Charmander   Fire     NaN    309  39      52       43      60
##
##    Sp_Def  Speed  Generation  Legendary
## 0      65     45           1      False
## 1      80     60           1      False
## 2     100     80           1      False
## 3     120     80           1      False
## 4      50     65           1      False
```

```
print(pokemon.shape)
```

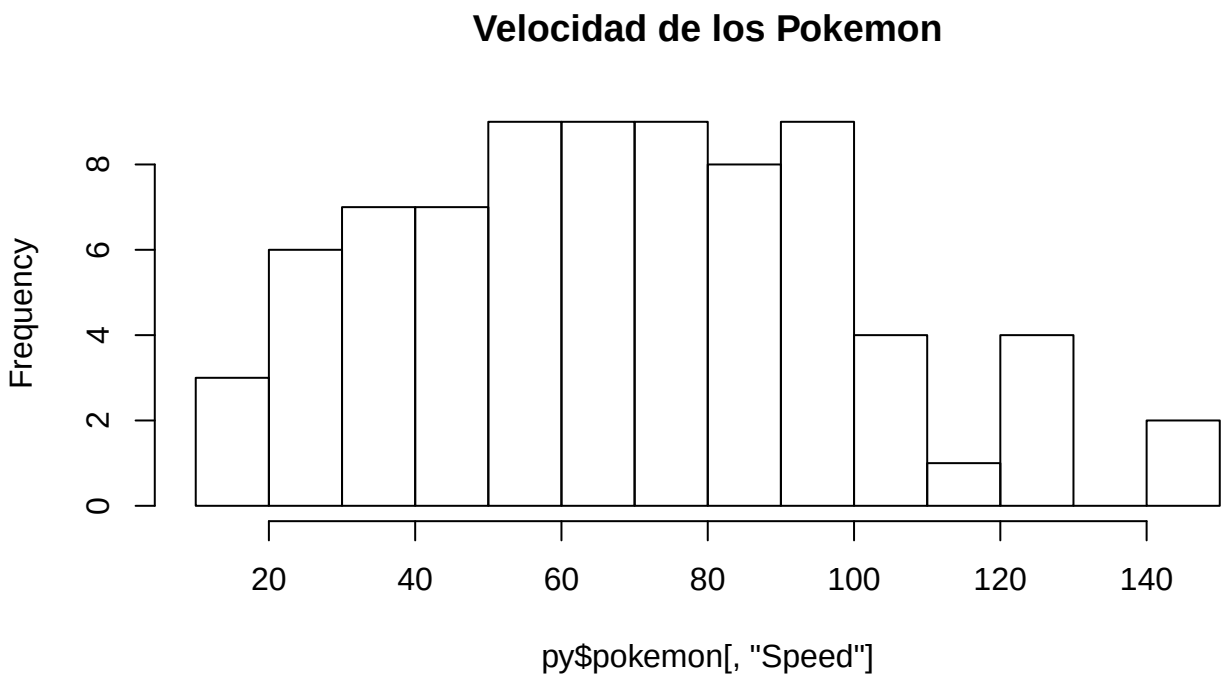
```
## (800, 12)
```

```
pokemon = pokemon[pokemon["Generation"]==1]
pokemon = pokemon[["Type 1", "Type 2", "Speed"]]
pokemon = pokemon.dropna()
print(pokemon.shape)
```

```
## (78, 3)
```

### Transmision de los datos de Python a R

```
hist(py$pokemon[,"Speed"], breaks = 10, main = "Velocidad de los Pokemon")
```




**Pokemon (R -> Python)**

**Carga de datos en R**

```
pokemon2 <- read.csv("/Users/heinerleivagmail.com/Documents/GitHub/r-basic/data/Pokemon.csv", header = T
head(pokemon2)
```

```
##                   Name Type.1 Type.2 Total HP Attack Defense Sp_Atk Sp_Def
## 1             Bulbasaur  Grass Poison   318 45     49      49     65     65
## 2               Ivysaur  Grass Poison   405 60     62      63     80     80
## 3              Venusaur  Grass Poison   525 80     82      83    100    100
## 4 VenusaurMega Venusaur  Grass Poison   625 80    100     123    122    120
## 5            Charmander   Fire          309 39     52      43     60     50
## 6            Charmeleon   Fire          405 58     64      58     80     65
##   Speed Generation Legendary
## 1    45          1     False
## 2    60          1     False
## 3    80          1     False
## 4    80          1     False
## 5    65          1     False
## 6    80          1     False
```

```
library(tidyverse)
```

```
## -- Attaching packages --------------------------- tidyverse 1.3.0 --
```

```
## v ggplot2 3.3.2     v purrr   0.3.4
## v tibble  3.0.3     v dplyr   1.0.2
## v tidyr   1.1.2     v stringr 1.4.0
## v readr   1.3.1     v forcats 0.5.0
```

```
## Warning: package 'ggplot2' was built under R version 3.6.2
```

```
## Warning: package 'tibble' was built under R version 3.6.2
```

```
## Warning: package 'purrr' was built under R version 3.6.2
```

```
## Warning: package 'dplyr' was built under R version 3.6.2
```

```
## -- Conflicts ------------------------------- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
pokemon2 <- pokemon2 %>%
  filter(Generation == 1) %>%
  select(Type.1, Type.2, Speed) %>%
  na.omit()
summary(pokemon2)
```

```
##      Type.1       Type.2       Speed
##  Water  :31          :88   Min.   : 15.00
##  Normal :24   Flying :23   1st Qu.: 50.00
##  Bug    :14   Poison :22   Median : 70.00
##  Fire   :14   Psychic: 7   Mean   : 72.58
##  Poison :14   Ground : 6   3rd Qu.: 92.25
##  Grass  :13   Water  : 4   Max.   :150.00
##  (Other):56   (Other):16
```

### Transmision de datos en R a Python

```
print(r.pokemon2.head())
```

```
##   Type.1  Type.2  Speed
## 0  Grass  Poison     45
## 1  Grass  Poison     60
## 2  Grass  Poison     80
## 3  Grass  Poison     80
## 4   Fire             65
```