Pokemon

Curso de Estadística Descriptiva

9/1/2019

Pokemon (Py -> R)

Limpieza de datos en Python

```
import pandas as pd
pokemon = pd.read_csv("../../data/Pokemon.csv")
print(pokemon.head())
```

```
##                    Name Type 1  Type 2  ...  Speed  Generation  Legendary
## 0             Bulbasaur  Grass  Poison  ...     45           1      False
## 1               Ivysaur  Grass  Poison  ...     60           1      False
## 2              Venusaur  Grass  Poison  ...     80           1      False
## 3  VenusaurMega Venusaur  Grass  Poison  ...     80           1      False
## 4            Charmander   Fire     NaN  ...     65           1      False
##
## [5 rows x 12 columns]
```

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

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

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

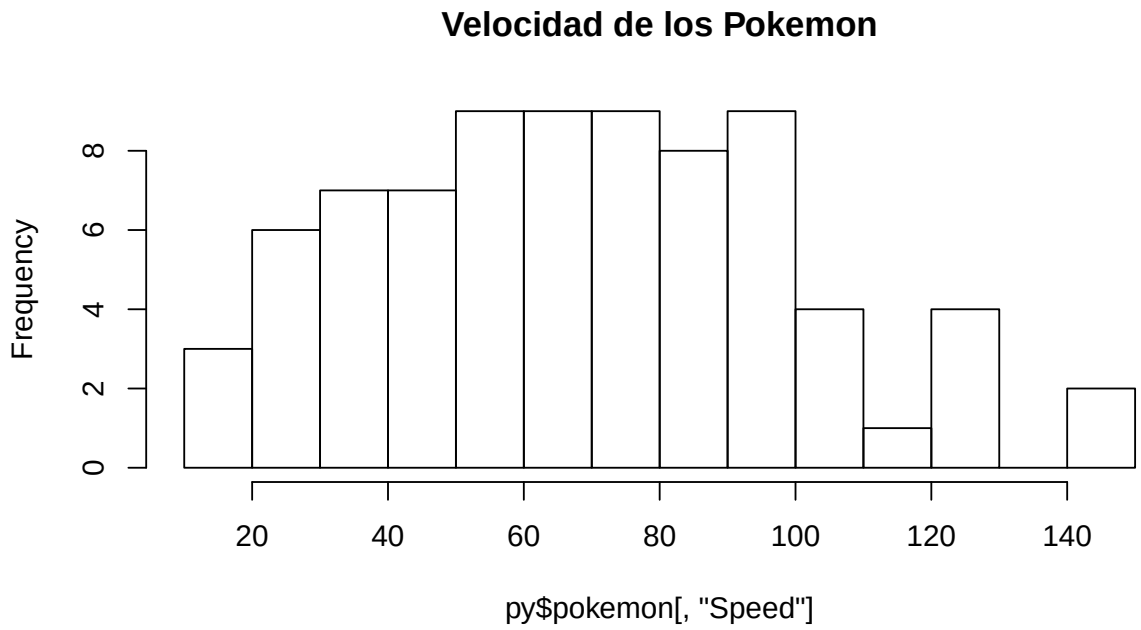
```
## (166, 3)
```

```
pokemon = pokemon.dropna()
print(pokemon.shape)
```

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

Transmisión de los datos de Python a R

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



Pokemon (R -> Py)

Carga de datos en R

```r
pokemon2 <- read.csv("../../data/Pokemon.csv", header = TRUE)
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 3.3.0     v purrr   0.3.4
## v tibble  3.0.1     v dplyr   0.8.5
## v tidyr   1.0.3     v stringr 1.4.0
## v readr   1.3.1     v forcats 0.5.0

## -- 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
```

Transmisión de datos de 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
```