

# “R: Gráficos básicos”

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# Gráficos con R

- `plot()`
- `hist()`
- `barplot()`
- `boxplot()`

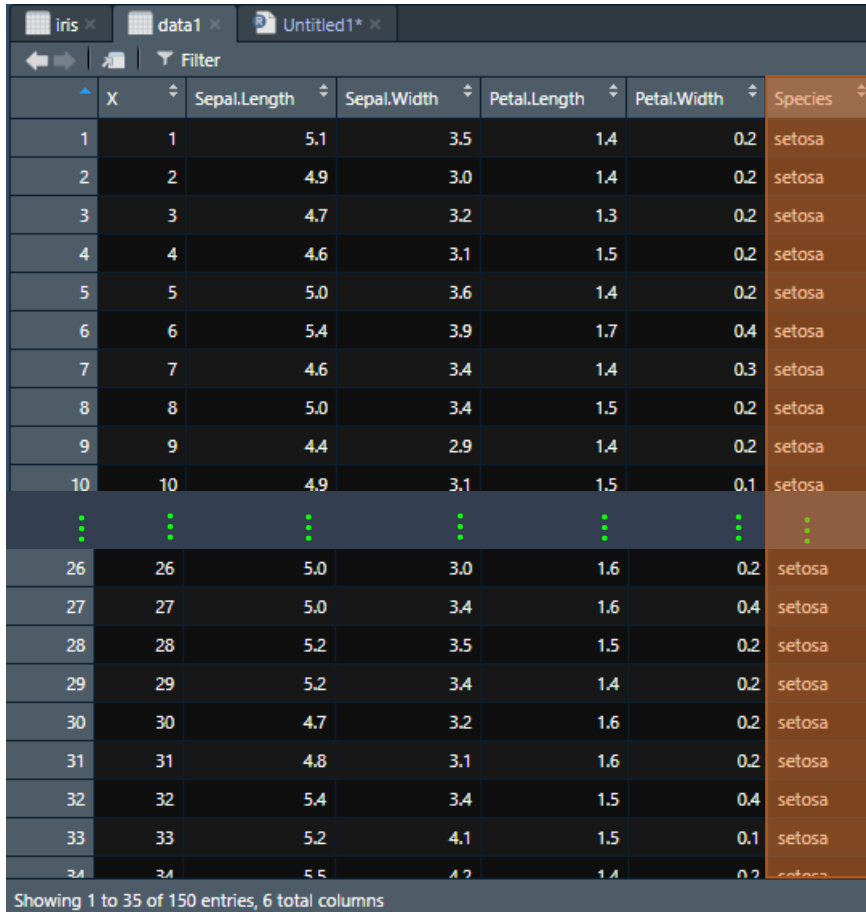
# Importar datos con EXCEL

```
> data("iris")
> View(iris)
> str(iris)
'data.frame':  150 obs. of  5 variables:
 $ Sepal.Length: num  5.1 4.9 4.7 4.6 5 5.4 4.6 5 4.4 4.9 ...
 $ Sepal.Width : num  3.5 3 3.2 3.1 3.6 3.9 3.4 3.4 2.9 3.1 ...
 $ Petal.Length: num  1.4 1.4 1.3 1.5 1.4 1.7 1.4 1.5 1.4 1.5 ...
 $ Petal.Width : num  0.2 0.2 0.2 0.2 0.2 0.4 0.3 0.2 0.2 0.1 ...
 $ Species     : Factor w/ 3 levels "setosa","versicolor",...: 1 1 1 1
1 1 1 1 1 1 ...
```

# Importar datos con EXCEL

```
> is.factor(iris$Species)
[1] TRUE
> # guarde el archivo en formato csv
> write.csv(iris, file="C:/Users/HP/Documents/iris.csv")
> # Abrirlo el archivo con el nombre data1
> data1 <- read.csv("C:/Users/HP/Documents/iris.csv")
> View(data1)
```

# Importar datos con EXCEL



|    | X  | Sepal.Length | Sepal.Width | Petal.Length | Petal.Width | Species |
|----|----|--------------|-------------|--------------|-------------|---------|
| 1  | 1  | 5.1          | 3.5         | 1.4          | 0.2         | setosa  |
| 2  | 2  | 4.9          | 3.0         | 1.4          | 0.2         | setosa  |
| 3  | 3  | 4.7          | 3.2         | 1.3          | 0.2         | setosa  |
| 4  | 4  | 4.6          | 3.1         | 1.5          | 0.2         | setosa  |
| 5  | 5  | 5.0          | 3.6         | 1.4          | 0.2         | setosa  |
| 6  | 6  | 5.4          | 3.9         | 1.7          | 0.4         | setosa  |
| 7  | 7  | 4.6          | 3.4         | 1.4          | 0.3         | setosa  |
| 8  | 8  | 5.0          | 3.4         | 1.5          | 0.2         | setosa  |
| 9  | 9  | 4.4          | 2.9         | 1.4          | 0.2         | setosa  |
| 10 | 10 | 4.9          | 3.1         | 1.5          | 0.1         | setosa  |
|    |    |              |             |              |             |         |
| 26 | 26 | 5.0          | 3.0         | 1.6          | 0.2         | setosa  |
| 27 | 27 | 5.0          | 3.4         | 1.6          | 0.4         | setosa  |
| 28 | 28 | 5.2          | 3.5         | 1.5          | 0.2         | setosa  |
| 29 | 29 | 5.2          | 3.4         | 1.4          | 0.2         | setosa  |
| 30 | 30 | 4.7          | 3.2         | 1.6          | 0.2         | setosa  |
| 31 | 31 | 4.8          | 3.1         | 1.6          | 0.2         | setosa  |
| 32 | 32 | 5.4          | 3.4         | 1.5          | 0.4         | setosa  |
| 33 | 33 | 5.2          | 4.1         | 1.5          | 0.1         | setosa  |
| 34 | 34 | 5.5          | 4.2         | 1.4          | 0.2         | setosa  |

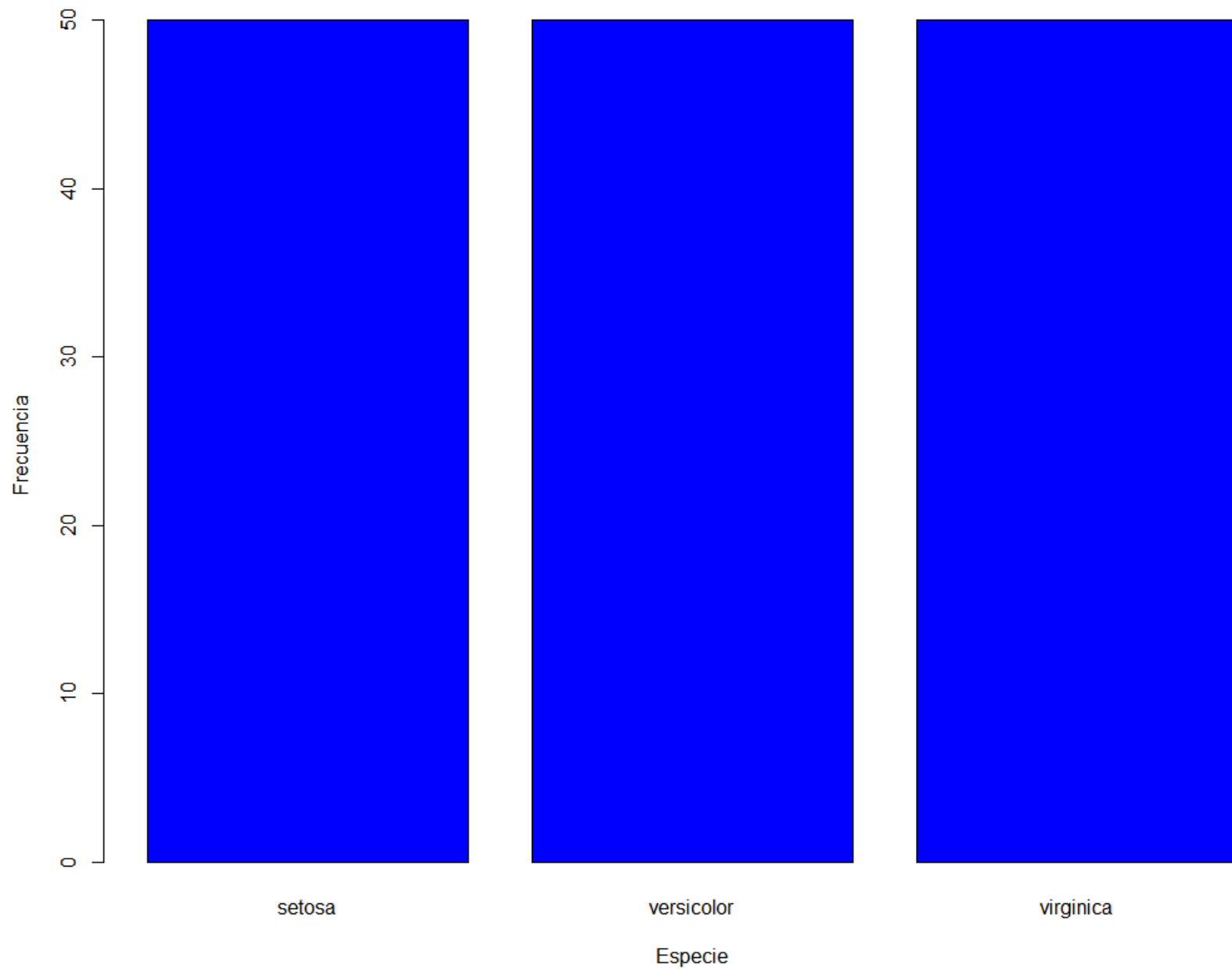
Showing 1 to 35 of 150 entries, 6 total columns

```
> is.factor(data1$Species)
[1] FALSE
> species1 <- as.factor(data1$Species)
> is.factor(species1)
[1] TRUE
> data1$species1 <- species1
```

# plot() variable categórica

```
> plot(data1$species1)
> plot(data1$species1,ylab="Frecuencia", xlab="Especie")
> plot(data1$species1,ylab="Frecuencia", xlab="Especie",
col=100)
> plot(data1$species1,ylab="Frecuencia", xlab="Especie",
col="gray", main="Gráfico de barras")
```

Gráfico de barras

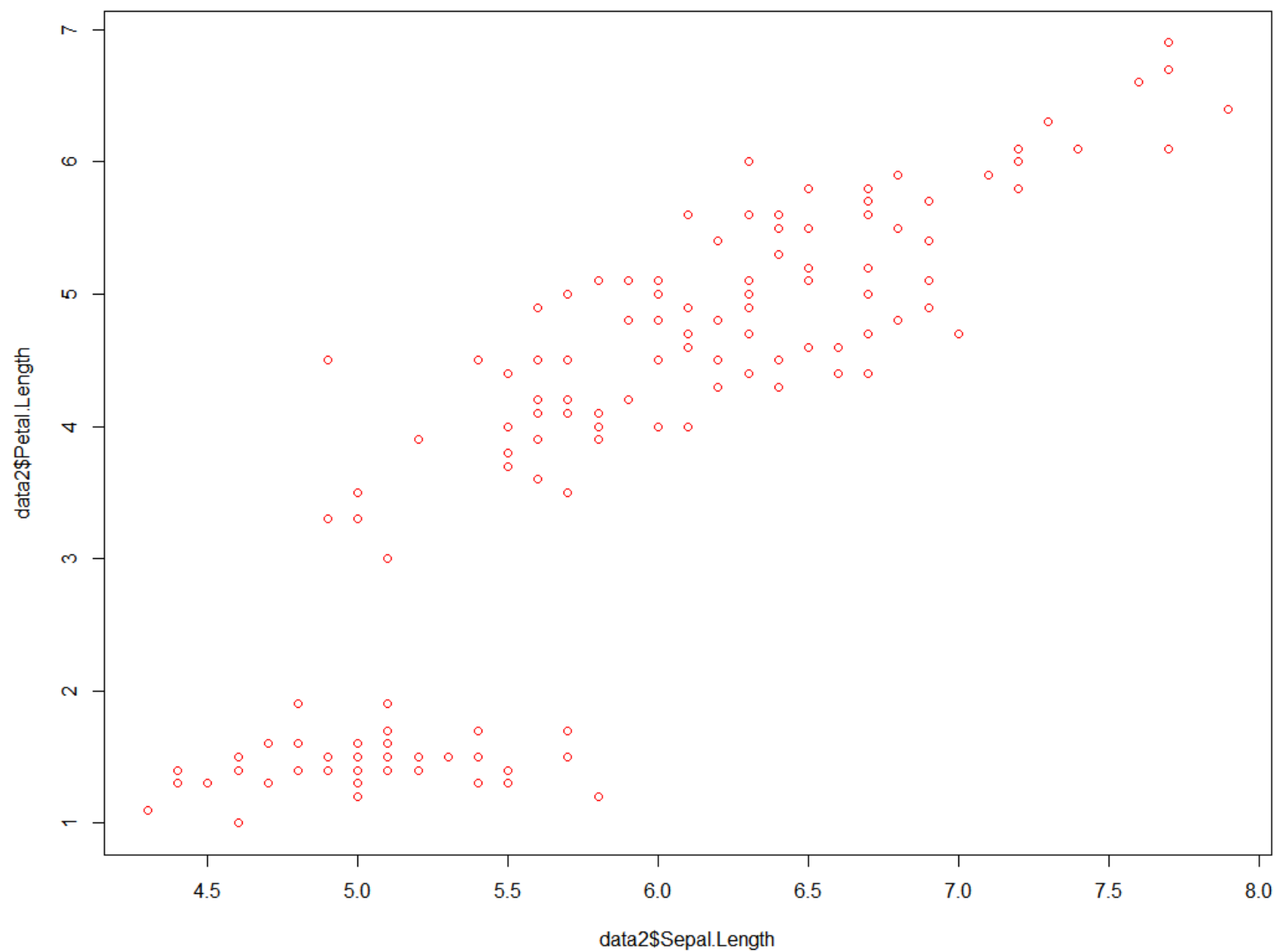


# plot() variable numérica

```
> plot(data1$Sepal.Length, data1$Petal.Length)
> plot(data1$Sepal.Length, data1$Petal.Length, main =
"Gráfico de dispersión")
> plot(data1$Sepal.Length, data1$Petal.Length, main =
"Gráfico de dispersión", col="red")
```



Gráfico de dispersión



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