R Notebook

Data frame de Iris

```r
df = iris
head(df, 5)
```

```
##   Sepal.Length Sepal.Width Petal.Length Petal.Width Species
## 1          5.1         3.5          1.4         0.2  setosa
## 2          4.9         3.0          1.4         0.2  setosa
## 3          4.7         3.2          1.3         0.2  setosa
## 4          4.6         3.1          1.5         0.2  setosa
## 5          5.0         3.6          1.4         0.2  setosa
```

```r
tail(df, 5)
```

```
##     Sepal.Length Sepal.Width Petal.Length Petal.Width   Species
## 146          6.7         3.0          5.2         2.3 virginica
## 147          6.3         2.5          5.0         1.9 virginica
## 148          6.5         3.0          5.2         2.0 virginica
## 149          6.2         3.4          5.4         2.3 virginica
## 150          5.9         3.0          5.1         1.8 virginica
```

```r
str(df)
```

```
## '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 ...
```

```r
names(df) #colnames
```

```
## [1] "Sepal.Length" "Sepal.Width"  "Petal.Length" "Petal.Width"  "Species"
```

```r
rownames(df)
```

```
##  [1] "1"  "2"  "3"  "4"  "5"  "6"  "7"  "8"  "9"  "10" "11" "12"
## [13] "13" "14" "15" "16" "17" "18" "19" "20" "21" "22" "23" "24"
## [25] "25" "26" "27" "28" "29" "30" "31" "32" "33" "34" "35" "36"
## [37] "37" "38" "39" "40" "41" "42" "43" "44" "45" "46" "47" "48"
## [49] "49" "50" "51" "52" "53" "54" "55" "56" "57" "58" "59" "60"
```

```
## [61] "61"  "62"  "63"  "64"  "65"  "66"  "67"  "68"  "69"  "70"  "71"  "72"
## [73] "73"  "74"  "75"  "76"  "77"  "78"  "79"  "80"  "81"  "82"  "83"  "84"
## [85] "85"  "86"  "87"  "88"  "89"  "90"  "91"  "92"  "93"  "94"  "95"  "96"
## [97] "97"  "98"  "99"  "100" "101" "102" "103" "104" "105" "106" "107" "108"
## [109] "109" "110" "111" "112" "113" "114" "115" "116" "117" "118" "119" "120"
## [121] "121" "122" "123" "124" "125" "126" "127" "128" "129" "130" "131" "132"
## [133] "133" "134" "135" "136" "137" "138" "139" "140" "141" "142" "143" "144"
## [145] "145" "146" "147" "148" "149" "150"
```

```r
dimnames(df)
```

```
## [[1]]
##   [1] "1"   "2"   "3"   "4"   "5"   "6"   "7"   "8"   "9"   "10"  "11"  "12"
##  [13] "13"  "14"  "15"  "16"  "17"  "18"  "19"  "20"  "21"  "22"  "23"  "24"
##  [25] "25"  "26"  "27"  "28"  "29"  "30"  "31"  "32"  "33"  "34"  "35"  "36"
##  [37] "37"  "38"  "39"  "40"  "41"  "42"  "43"  "44"  "45"  "46"  "47"  "48"
##  [49] "49"  "50"  "51"  "52"  "53"  "54"  "55"  "56"  "57"  "58"  "59"  "60"
##  [61] "61"  "62"  "63"  "64"  "65"  "66"  "67"  "68"  "69"  "70"  "71"  "72"
##  [73] "73"  "74"  "75"  "76"  "77"  "78"  "79"  "80"  "81"  "82"  "83"  "84"
##  [85] "85"  "86"  "87"  "88"  "89"  "90"  "91"  "92"  "93"  "94"  "95"  "96"
##  [97] "97"  "98"  "99"  "100" "101" "102" "103" "104" "105" "106" "107" "108"
## [109] "109" "110" "111" "112" "113" "114" "115" "116" "117" "118" "119" "120"
## [121] "121" "122" "123" "124" "125" "126" "127" "128" "129" "130" "131" "132"
## [133] "133" "134" "135" "136" "137" "138" "139" "140" "141" "142" "143" "144"
## [145] "145" "146" "147" "148" "149" "150"
##
## [[2]]
## [1] "Sepal.Length" "Sepal.Width"  "Petal.Length" "Petal.Width"  "Species"
```

```r
dim(df)
```

```
## [1] 150   5
```

```r
df$Petal.Length[1:10]
```

```
##  [1] 1.4 1.4 1.3 1.5 1.4 1.7 1.4 1.5 1.4 1.5
```

```r
df$Species[1:10]
```

```
##  [1] setosa setosa setosa setosa setosa setosa setosa setosa setosa setosa
## Levels: setosa versicolor virginica
```

Acceso al DF

```r
df[1:10, ]
```

```
##   Sepal.Length Sepal.Width Petal.Length Petal.Width Species
## 1          5.1         3.5          1.4         0.2  setosa
## 2          4.9         3.0          1.4         0.2  setosa
```

```
## 3             4.7          3.2          1.3          0.2  setosa
## 4             4.6          3.1          1.5          0.2  setosa
## 5             5.0          3.6          1.4          0.2  setosa
## 6             5.4          3.9          1.7          0.4  setosa
## 7             4.6          3.4          1.4          0.3  setosa
## 8             5.0          3.4          1.5          0.2  setosa
## 9             4.4          2.9          1.4          0.2  setosa
## 10            4.9          3.1          1.5          0.1  setosa
```

```
df[1:10, 2:4]
```

```
##    Sepal.Width Petal.Length Petal.Width
## 1          3.5          1.4         0.2
## 2          3.0          1.4         0.2
## 3          3.2          1.3         0.2
## 4          3.1          1.5         0.2
## 5          3.6          1.4         0.2
## 6          3.9          1.7         0.4
## 7          3.4          1.4         0.3
## 8          3.4          1.5         0.2
## 9          2.9          1.4         0.2
## 10         3.1          1.5         0.1
```

```
a=df[df$Species == "setosa" & df$Sepal.Width> 4, ]
a
```

```
##    Sepal.Length Sepal.Width Petal.Length Petal.Width Species
## 16          5.7         4.4          1.5         0.4  setosa
## 33          5.2         4.1          1.5         0.1  setosa
## 34          5.5         4.2          1.4         0.2  setosa
```

```
df[df$Species == "setosa" & df$Sepal.Width> 4, ][c(1,3), c(2,5)]
```

```
##    Sepal.Width Species
## 16         4.4  setosa
## 34         4.2  setosa
```