

Intro_Rstudio.R

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```
# Esto es un comentario  
# Simbolo de asignacion <-  
# Funciones basicas
```

```
# Suma  
1000 + 123
```

```
## [1] 1123
```

```
# Resta  
233 - 30
```

```
## [1] 203
```

```
# Exponente  
2**3
```

```
## [1] 8
```

```
2^3
```

```
## [1] 8
```

```
# Division  
125 / 25
```

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

```
# Multiplicacion  
5 * 9
```

```
## [1] 45
```

```
# Notaci??n cientifica  
1E-8
```

```
## [1] 1e-08
```

```
1e-8
```

```
## [1] 1e-08
```

```
# Raiz cuadrada  
sqrt(8)
```

```
## [1] 2.828427
```

```
# Sumatoria  
sum( c(1,2,3,4,5,6,7,8,9) )
```

```
## [1] 45
# Tipos de variables

# Numericas
x <- 1
y <- 1.2
z <- 3.1416
class(x)

## [1] "numeric"

# Logicas
a <- TRUE
b <- FALSE
a == b

## [1] FALSE
a != b

## [1] TRUE
x == y

## [1] FALSE
x < y

## [1] TRUE
class(a)

## [1] "logical"

# Caracter
ejemplo <- "abcde"
class(ejemplo)

## [1] "character"

# Vectores simbolo "c" de concatenar
vector_1 <- c(1,3,5,7)
vector_1[4]

## [1] 7
vector_1[1:3]

## [1] 1 3 5
vector_1[-4]

## [1] 1 3 5
vector_2 <- c("a","b", "ab", "c", "a")
vector_2 == "a"

## [1] TRUE FALSE FALSE FALSE TRUE
vector_2[vector_2 == "a"]

## [1] "a" "a"
```

```
vector_2 != "a"

## [1] FALSE TRUE TRUE TRUE FALSE
vector_2[vector_2 != "a"]
```

```
## [1] "b" "ab" "c"
seleccion <- vector_2 != "a"
filtrado <- vector_2[seleccion]
filtrado
```

```
## [1] "b" "ab" "c"
#Funciones pre cargadas de R
#Para numeros
abs(-1)
```

```
## [1] 1
ceiling(3.6)
```

```
## [1] 4
trunc(3.6)
```

```
## [1] 3
floor(3.6)
```

```
## [1] 3
cos(90)
```

```
## [1] -0.4480736
sin(90)
```

```
## [1] 0.8939967
tan(90)
```

```
## [1] -1.9952
exp(2)
```

```
## [1] 7.389056
log10(3)
```

```
## [1] 0.4771213
log(3)
```

```
## [1] 1.098612
log2(3)
```

```
## [1] 1.584963
max(c(3, 100, 345, 78))
```

```
## [1] 345
min(c(3, 100, 345, 78))
```

```
## [1] 3
order(c(3, 100, 345, 78))

## [1] 1 4 2 3
sort(c(3, 100, 345, 78))

## [1] 3 78 100 345
prod(c(3, 100, 345, 78))

## [1] 8073000
range(c(3, 100, 345, 78))

## [1] 3 345
rev(c(3, 100, 345, 78))

## [1] 78 345 100 3
sample(c(3, 100, 345, 78), 1)

## [1] 345
summary(c(3, 100, 345, 78))

##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      3.00  59.25   89.00  131.50  161.25  345.00
sum(c(3, 100, 345, 78))

## [1] 526
var(c(3, 100, 345, 78))

## [1] 21983
```