

Main.Rmd

2023-06-01

```
2 + 1

## [1] 3
sin(pi/6)

## [1] 0.5
cats <- 5
dogs <- 2
pets <- cats + dogs

ls()

## [1] "cats" "dogs" "pets"
# ?rnorm
rnorm(15, mean = 5, sd = 3)

## [1] -0.2341113  7.4702441  4.3003272  9.0117005  1.4742303  7.8948352
## [7]  0.6937060  7.4542696  6.4222282  5.8500867  5.4004158  7.7733044
## [13]  5.9180289  4.1548308  5.4746655

returntwo <- function() {
  y <- 2
  return(y)
}

returntwo()

## [1] 2
addten <- function(x) {
  x <- x + 10
}

addten(cats)
cats

## [1] 5
addten <- function(x) {
  return(x + 10)
}

morecats <- addten(cats)
morecats

## [1] 15
```

```

addten <- function(x) {
  moredogs <- x + 10
}

addten(dogs)
dogs

## [1] 2
moredogs

## [1] 12
ls()

## [1] "addten"      "cats"         "dogs"         "morecats"     "moredogs"     "pets"
## [7] "returntwo"

rm(dogs)
rm(moredogs)
ls()

## [1] "addten"      "cats"         "morecats"     "pets"         "returntwo"
#
rm(list = ls())
ls()

## character(0)
# ?help
# ?help.search

# ?`<-`
# ?ls

# ?`function`
# ?rm

x <- vector(length = 2)
x[1] <- 5
x[2] <- 8
x

## [1] 5 8
y <- c(x, 1, c(3, 4), x, NA)
y

## [1] 5 8 1 3 4 5 8 NA
c(x, y)

## [1] 5 8 5 8 1 3 4 5 8 NA
5:9

## [1] 5 6 7 8 9
3:-1

```

```
## [1] 3 2 1 0 -1
seq(1, 2, by = 0.25)

## [1] 1.00 1.25 1.50 1.75 2.00
seq(3, 4, length.out = 5)

## [1] 3.00 3.25 3.50 3.75 4.00
seq(3, 4, length = 5)

## [1] 3.00 3.25 3.50 3.75 4.00
seq(3, 4, length = 11)

## [1] 3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9 4.0
rep(1:3, times = 3)

## [1] 1 2 3 1 2 3 1 2 3
rep(1:3, each = 4)

## [1] 1 1 1 1 2 2 2 2 3 3 3 3
rep(1:3, length.out = 5)

## [1] 1 2 3 1 2
```