> x <- 1:5

> x

[1] 1 2 3 4 5

> x[3]

[1] 3

> x +100

[1] 101 102 103 104 105

> x + c(100,1)

[1] 101 3 103 5 105

Warning message:

In x + c(100, 1) :

longer object length is not a multiple of shorter object length

> y <- c("barry", " chris", "hamza", "isabelle")

> y

[1] "barry" " chris" "hamza" "isabelle"

> y + 100

Error in y + 100 : non-numeric argument to binary operator

> z <- c("barry", " chris", "hamza", "isabelle",100)

> z

[1] "barry" " chris" "hamza" "isabelle" "100"

> z+100

Error in z + 100 : non-numeric argument to binary operator

> #Coercion

> x <- c(TRUE,FALSE,T,T,F)

> x

[1] TRUE FALSE TRUE TRUE FALSE

> #logical vector

> x + 100

[1] 101 100 101 101 100

> grades <- c(6,10,9,8)

> grades

[1] 6 10 9 8

> sum(grades > 7)

[1] 3

> grades <- c("barry"=6, " chris"=10, "hamza"=9)

> names(grades)

[1] "barry" " chris" "hamza"

> sort(grades)

barry hamza chris

6 9 10

> df <- data.frame(nums=1:5,chars=letters[1:5])

> letters

[1] "a" "b" "c" "d" "e" "f" "g" "h" "i" "j" "k" "l" "m" "n" "o" "p" "q" "r"

[19] "s" "t" "u" "v" "w" "x" "y" "z"

> df

nums chars

1 1 a

2 2 b

3 3 c

4 4 d

5 5 e

> df <- data.frame(nums=1:5,chars=letters[1:5],logical=c(T,T,F,T,F))

> df

nums chars logical

1 1 a TRUE

2 2 b TRUE

3 3 c FALSE

4 4 d TRUE

5 5 e FALSE

> View(df)

> View(df)

> df <- data.frame(nums=1:5,chars=letters[1:5],logical=c(T))

> sf

Error: object 'sf' not found

> df

nums chars logical

1 1 a TRUE

2 2 b TRUE

3 3 c TRUE

4 4 d TRUE

5 5 e TRUE

> View(df)

> View(df)

> df$nums

[1] 1 2 3 4 5

> savehistory("~/Desktop/class4.Rhistory")

> df[2,2]

[1] "b"

> df[,2]

[1] "a" "b" "c" "d" "e"

> df[5,2]

[1] "e"

> df$chars

[1] "a" "b" "c" "d" "e"

> df[,-2]

nums logical

1 1 TRUE

2 2 TRUE

3 3 TRUE

4 4 TRUE

5 5 TRUE

> df[2,]

nums chars logical

2 2 b TRUE

> df[-2]

nums logical

1 1 TRUE

2 2 TRUE

3 3 TRUE

4 4 TRUE

5 5 TRUE

> df[-2,]

nums chars logical

1 1 a TRUE

3 3 c TRUE

4 4 d TRUE

5 5 e TRUE

> df

nums chars logical

1 1 a TRUE

2 2 b TRUE

3 3 c TRUE

4 4 d TRUE

5 5 e TRUE

>

>

>

>

>

>

>

>

>

> df[3,5]

NULL

> df

nums chars logical

1 1 a TRUE

2 2 b TRUE

3 3 c TRUE

4 4 d TRUE

5 5 e TRUE

> df[3,5]

NULL

> df[3,]

nums chars logical

3 3 c TRUE

> df[3:5,]

nums chars logical

3 3 c TRUE

4 4 d TRUE

5 5 e TRUE

> x>=3

[1] FALSE FALSE FALSE FALSE FALSE

> df[x,1]

[1] 1 3 4

> df

nums chars logical

1 1 a TRUE

2 2 b TRUE

3 3 c TRUE

4 4 d TRUE

5 5 e TRUE

> x

[1] TRUE FALSE TRUE TRUE FALSE

> subset(df,nums>=3)

nums chars logical

3 3 c TRUE

4 4 d TRUE

5 5 e TRUE

> df[>=3,1]

Error: unexpected '>=' in "df[>="

> df[,]>=3

nums chars logical

[1,] FALSE TRUE FALSE

[2,] FALSE TRUE FALSE

[3,] TRUE TRUE FALSE

[4,] TRUE TRUE FALSE

[5,] TRUE TRUE FALSE

> df[nums>=3,]

Error in `[.data.frame`(df, nums >= 3, ) : object 'nums' not found

> df

nums chars logical

1 1 a TRUE

2 2 b TRUE

3 3 c TRUE

4 4 d TRUE

5 5 e TRUE

> df[c[F,F,T,T,T],1]

Error in c[F, F, T, T, T] : object of type 'builtin' is not subsettable

> df[c(F,F,T,T,T),1]

[1] 3 4 5

> df[c(F,F,T,T,T)]

Error in `[.data.frame`(df, c(F, F, T, T, T)) :

undefined columns selected

> df[c(F,F,T,T,T),]

nums chars logical

3 3 c TRUE

4 4 d TRUE

5 5 e TRUE

> df[df$nums>=2,]

nums chars logical

2 2 b TRUE

3 3 c TRUE

4 4 d TRUE

5 5 e TRUE

> df[df$nums>=3,]

nums chars logical

3 3 c TRUE

4 4 d TRUE

5 5 e TRUE

> df[3:,]

Error: unexpected ',' in "df[3:,"

> sum(1:5)

[1] 15

> c(1:5)

[1] 1 2 3 4 5

> x <- 1:50

> plot(x)

> plot(x,sin(x))

> plot(x,sin(x),typ="l",col="blue",lwd = "3")

> plot(x,sin(x),typ="l",col="red",lwd = "1")

> plot(x,sin(x),typ="l",col="magenta",lwd = "2")

> plot(x,sin(x),typ="l\p",col="magenta",lwd = "2")

Error: '\p' is an unrecognized escape in character string starting ""l\p"

> plot(x,sin(x),typ="p",col="magenta",lwd = "2")

> plot(x,sin(x),typ="l",col="green",lwd = "2")

> ?col

> ?colors

> ?lwd

No documentation for ‘lwd’ in specified packages and libraries:

you could try ‘??lwd’

> ?log

> plot(x,sin(x),typ="b",col="magenta",lwd = "2")

> plot(x,sin(x),typ="h",col="cyan",lwd = "2")

> plot(x,sin(x),typ="l",col="cyan",lwd = "3")

> source("~/Desktop/BGGN 213/week2/Class4\_R\_Jie.R")

>