> #B1 Help

> '?'()

Error in `?`() : argument "topicExpr" is missing, with no default

> '?'(mean())

> help("mean", htmlhelp = FALSE)

Error in help("mean", htmlhelp = FALSE) :

unused argument (htmlhelp = FALSE)

> help.search("mean")

> #B2 Assignment

> a<- 2+3

> a

[1] 5

> b <- a+a

> a+a; a+b

[1] 10

[1] 15

> #DataStructures Looking at Vectors B3.1 Vectors

> Y <- c(8.3, 8.6, 10.7, 10.8, 11, 11, 11.1, 11.2, 11.3, 11.4)

> #sequences

> 1:4

[1] 1 2 3 4

> 4:1

[1] 4 3 2 1

> -1:3

[1] -1 0 1 2 3

> #more complicated sequences

> seq(from =1, to =3, by =0.2)

[1] 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0

> seq(1, 3, length =7)

[1] 1.000000 1.333333 1.666667 2.000000 2.333333 2.666667

[7] 3.000000

> #repetitive sequences

> rep(1, 3)

[1] 1 1 1

> rep (1:3, 2)

[1] 1 2 3 1 2 3

> rep (1:3, each =2)

[1] 1 1 2 2 3 3

> B3.2 Getting information about vectors

Error: unexpected symbol in "B3.2 Getting"

> #B 3.2 Getting information about vectors

> sum(Y)

[1] 105.4

> mean(y)

names <- c("Sarah", "Yunluan")

> names

[1] "Sarah" "Yunluan"

> b <- c(TRUE, FALSE)

> b

[1] TRUE FALSE

> #vectors can be classes

> class(y)

Error: object 'y' not found

> class(b)

[1] "logical"

> Sum(Y)

Error: could not find function "Sum"

> sum(Y)

[1] 105.4

> mean(Y)

[1] 10.54

> max(Y)

[1] 11.4

> length(Y)

[1] 10

> class(Y)

[1] "numeric"

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| --- |
| Y > 10  [1] FALSE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE  [10] TRUE  > Y > mean(Y)  [1] FALSE FALSE TRUE TRUE TRUE TRUE TRUE TRUE TRUE  [10] TRUE  > Y == 11  [1] FALSE FALSE FALSE FALSE TRUE TRUE FALSE FALSE FALSE  [10] FALSE  > #does not equal to  > Y != 11  [1] TRUE TRUE TRUE TRUE FALSE FALSE TRUE TRUE TRUE  [10] TRUE  > # ALgebra with Vectors  > a <- 1:3  > b <- 4:6  > a+b  [1] 5 7 9  > a\*b  [1] 4 10 18  > a/b  [1] 0.25 0.40 0.50  > a+1  [1] 2 3 4  > a\*2  [1] 2 4 6  > 1/a  [1] 1.0000000 0.5000000 0.3333333  > a\*1:2  [1] 1 4 3  Warning message:  In a \* 1:2 :  longer object length is not a multiple of shorter object length  > a\*1:2  [1] 1 4 3  Warning message:  In a \* 1:2 :  longer object length is not a multiple of shorter object length  > a \* 1:2  [1] 1 4 3  Warning message:  In a \* 1:2 :  longer object length is not a multiple of shorter object length  > #r warning because cannot multiply vector of length 3 by a vector of length 2  > a\* c(1, 2, 1)  [1] 1 4 3  > #must multiply by vectors of same size or a multiple of that factor  > 1:4 \* 1:2  [1] 1 4 3 8  > #possible because 4 is a multipleof 2 so its the same as below  > 1:4 \* c(1, 2, 1, 2)  [1] 1 4 3 8 |
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