



UAEM

Universidad Autónoma
del Estado de México



García Romero José Juan

Métodos Estadísticos Operaciones Básicas

21/02/2022

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RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help
Source on Save Run Addins Project: (None)

1 #José Juan García Romero
2 #Métodos Numéricos
3 #Operaciones Básicas De R
4
5 5+9
6 suma = 25+36
7 suma
8
9 0:9
10 9:0
11 1:6.6
12 1.5:6.9
13 2.3:6
14
15 vector = 0:6
16 vector
17 length(vector)
18 vector[4]
19
20 (1:20)*2
21 (0:2)+(1:3)
22
23 NOMBRES <- c("José","Marta","Pedro","Juan","Lizet","Carlos")
24 SEXO <- c("H","M","H","H","M","H")
25 SEXO == "H"
26 NOMBRES[SEXO == "M"]
27
28 matrix(data = 0:9, nrow = 5, ncol = 6)
29
30 DATOS <- c(
31 +80, 1.68, 36,
32 +30, 1.91, 40,
33 +70, 1.74, 28,
34 +89, 1.64, 25,
35 +65, 1.78, 19)
36 matrix(DATOS,5,3, by = "T", dim = list(c(),"PESO","ESTATURA","EDAD"))
37
38 MIS.DATOS <- matrix(DATOS, 5, 3, by = "T", dim = list(c("María","Pepe","Ana","Pedro","Juan"),
39 c("PESO","ESTATURA","EDAD")))
40
41 MIS.DATOS
42
43 MIS.DATOS[,2]
44 MIS.DATOS[5,]
45 MIS.DATOS[2,2]
46
47 MatrizA = matrix(1:6,2,3)
48 MatrizB = matrix(2:7,2,3)
49 MatrizA + MatrizB
50
51 seq(1,10,2)
52 seq(from = 1, to = 10, by = 2)
53

> 5+9
[1] 14
> suma = 25+36
> suma
[1] 61
> 0:9
[1] 0 1 2 3 4 5 6 7 8 9
> 9:0
[1] 9 8 7 6 5 4 3 2 1 0
> 1:6.6
[1] 1 2 3 4 5 6
> 1.5:6.9
[1] 1.5 2.5 3.5 4.5 5.5 6.5
> 2.3:6
[1] 2.3 3.3 4.3 5.3
> vector = 0:6
> vector
[1] 0 1 2 3 4 5 6
> length(vector)
[1] 7
> vector[4]
[1] 3
> (1:20)*2
[1] 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40
> (0:2)+(1:3)
[1] 1 3 5
> NOMBRES <- c("José","Marta","Pedro","Juan","Lizet","Carlos")
> SEXO <- c("H","M","H","H","M","H")
> SEXO == "H"
[1] TRUE FALSE TRUE TRUE FALSE TRUE
> NOMBRES[SEXO == "M"]
[1] "Marta" "Lizet"
> matrix(data = 0:9, nrow = 5, ncol = 6)
[,1] [,2] [,3] [,4] [,5] [,6]
[1,] 0 5 0 5 0 5
[2,] 1 6 1 6 1 6
[3,] 2 7 2 7 2 7
[4,] 3 8 3 8 3 8
[5,] 4 9 4 9 4 9
> DATOS <- c(
+ 80, 1.68, 36,
+ 30, 1.91, 40,
+ 70, 1.74, 28,
+ 89, 1.64, 25,
+ 65, 1.78, 19)
> matrix(DATOS,5,3, by = "T", dim = list(c(),"PESO","ESTATURA","EDA
D"))
PESO ESTATURA EDAD
[1,] 80 1.68 36
[2,] 30 1.91 40
[3,] 70 1.74 28
[4,] 89 1.64 25
[5,] 65 1.78 19
> MIS.DATOS <- matrix(DATOS, 5, 3, by = "T", dim = list(c("María","Pep
```

```
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Project: (None)

Untitled1.R
19
20 (1:20)*2
21 (0:2)+(1:3)
22
23 NOMBRES <- c("José","Marta","Pedro","Juan","Lizet","Carlos")
24 SEXO <- c("H","M","H","H","M","H")
25 SEXO == "H"
26 NOMBRES[SEXO == "M"]
27
28 matrix(data = 0:9, nrow = 5, ncol = 6)
29
30 DATOS <- c(
31 +80, 1.68, 36,
32 +80, 1.91, 40,
33 +70, 1.74, 28,
34 +89, 1.64, 25,
35 +65, 1.78, 19)
36 matrix(DATOS,5,3, by = "T", dim = list(c()),c("PESO","ESTATURA","EDAD"))
37
38 MIS.DATOS <- matrix(DATOS, 5, 3, by = "T", dim = list(c("Maria","Pepe","Ana","Pedro","Juan"),
39 c("PESO","ESTATURA","EDAD"))))
40 MIS.DATOS
41
42 MIS.DATOS[,2]
43 MIS.DATOS[5,]
44 MIS.DATOS[2,2]
45 MIS.DATOS["Pepe","ESTATURA"]
46
47 MatrizA = matrix(1:6,2,3)
48 MatrizB = matrix(2:7,2,3)
49 MatrizA + MatrizB
50
51 seq(1,10,2)
52 seq(from = 1, to = 10, by = 2)
53 seq(10, -6, -2)
54 seq(from = 1, to = 11, length = 6)
55 seq(from = 1, to = 12, length = 6)
56
57 x = c(0:10,50)
58 x
59
60 c(1,3,5,2)
61 c(T,F,T,T,F)
62
63 x <- c(1,3,5)
64 y <- c(2,4,6)
65 c(x,y)
66
67 scan()
68 lectura = scan()
69 lectura
70

37:1 (Top Level) R Script
Environment History Connections Tutorial Files Plots Packages Help Viewer
```

```
R 4.1.2 ~/\>
> MIS.DATOS <- matrix(DATOS, 5, 3, by = "T", dim = list(c("Maria","Pepe",
+ "Ana","Pedro","Juan"),
+ c("PESO","ESTATURA","EDAD"))))
> MIS.DATOS
      PESO ESTATURA EDAD
Maria    80    1.68   36
Pepe     30    1.91   40
Ana      70    1.74   28
Pedro    89    1.64   25
Juan     65    1.78   19
> MIS.DATOS[,2]
Maria Pepe Ana Pedro Juan
1.68 1.91 1.74 1.64 1.78
> MIS.DATOS[5,]
      PESO ESTATURA EDAD
      65.00    1.78   19.00
> MIS.DATOS[2,2]
[1] 1.91
> MIS.DATOS["Pepe","ESTATURA"]
[1] 1.91
> MatrizA = matrix(1:6,2,3)
> MatrizB = matrix(2:7,2,3)
> MatrizA + MatrizB
      [,1] [,2] [,3]
[1,]    3    7   11
[2,]    5    9   13
> seq(1,10,2)
[1] 1 3 5 7 9
> seq(from = 1, to = 10, by = 2)
[1] 1 3 5 7 9
> seq(10, -6, -2)
[1] 10  8  6  4  2  0 -2 -4 -6
> seq(from = 1, to = 11, length = 6)
[1] 1 3 5 7 9 11
> seq(from = 1, to = 12, length = 6)
[1] 1.0 3.2 5.4 7.6 9.8 12.0
> x = c(0:10,50)
> x
 [1]  0  1  2  3  4  5  6  7  8  9 10 50
> c(1,3,5,2)
[1] 1 3 5 2
> c(T,F,T,T,F)
[1] TRUE FALSE TRUE TRUE FALSE
> x <- c(1,3,5)
> y <- c(2,4,6)
> c(x,y)
[1] 1 3 5 2 4 6
> scan()
1: 0
2: 5
3: 10
4: 15
5: 20
6:
```

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18 vector[4]
19
20 (1:20)*2
21 (0:2)+(1:3)
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26 NOMBRES[SEXO == "M"]
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35 +65, 1.78, 19)
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42 MIS.DATOS[,2]
43 MIS.DATOS[5,]
44 MIS.DATOS[2,2]
45 MIS.DATOS["Pepe","ESTATURA"]
46
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48 MatrizB = matrix(2:7,2,3)
49 MatrizA + MatrizB
50
51 seq(1,10,2)
52 seq from = 1, to = 10, by = 2)
53 seq(10, -6, -2)
54 seq from = 1, to = 11, length = 6)
55 seq from = 1, to = 12, length = 6)
56
57 x = c(0:10,50)
58 x
59
60 c(1,3,5,2)
61 c(T,F,T,T,F)
62
63 x <- c(1,3,5)
64 y <- c(2,4,6)
65 c(x,y)
66
67 scan()
68 lectura = scan()
69 lectura
70

37:1 (Top Level) R Script
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```

```
R 4.1.2 ~/\>
> MIS.DATOS[,2]
      PESO ESTATURA EDAD
      65.00    1.78   19.00
> MIS.DATOS[2,2]
[1] 1.91
> MIS.DATOS["Pepe","ESTATURA"]
[1] 1.91
> MatrizA = matrix(1:6,2,3)
> MatrizB = matrix(2:7,2,3)
> MatrizA + MatrizB
      [,1] [,2] [,3]
[1,]    3    7   11
[2,]    5    9   13
> seq(1,10,2)
[1] 1 3 5 7 9
> seq(from = 1, to = 10, by = 2)
[1] 1 3 5 7 9
> seq(10, -6, -2)
[1] 10  8  6  4  2  0 -2 -4 -6
> seq(from = 1, to = 11, length = 6)
[1] 1 3 5 7 9 11
> seq(from = 1, to = 12, length = 6)
[1] 1.0 3.2 5.4 7.6 9.8 12.0
> x = c(0:10,50)
> x
 [1]  0  1  2  3  4  5  6  7  8  9 10 50
> c(1,3,5,2)
[1] 1 3 5 2
> c(T,F,T,T,F)
[1] TRUE FALSE TRUE TRUE FALSE
> x <- c(1,3,5)
> y <- c(2,4,6)
> c(x,y)
[1] 1 3 5 2 4 6
> scan()
1: 0
2: 5
3: 10
4: 15
5: 20
6:
Read 5 items
[1] 0 5 10 15 20
> lectura = scan()
1: 1
2: 2
3: 3
4: 4
5: 5
6:
Read 5 items
> lectura
[1] 1 2 3 4 5
> !
```