

# RWorksheet\_Somosera#3a.Rmd

2023-10-07

```
Flet<- LETTERS [1:11]
Flet
## [1] "A" "B" "C" "D" "E" "F" "G" "H" "I" "J" "K"

OddLet <- LETTERS[seq(1,25,2)]
OddLet
## [1] "A" "C" "E" "G" "I" "K" "M" "O" "Q" "S" "U" "W" "Y"

vwls <- c(letters[which(letters %in% c("a","e","i","o","u"))],
          LETTERS[which(LETTERS %in% c("A","E","I","O","U"))])
vwls
## [1] "a" "e" "i" "o" "u" "A" "E" "I" "O" "U"

lastfv<- tail(letters, 5)
lastfv
## [1] "v" "w" "x" "y" "z"

Betweenletters<- letters[15:24]
Betweenletters
## [1] "o" "p" "q" "r" "s" "t" "u" "v" "w" "x"

City <- c("Tuguegarao City, Manila, Iloilo City, Tacloban, Samal Island ,Davao City")
City
## [1] "Tuguegarao City, Manila, Iloilo City, Tacloban, Samal Island ,Davao City"

Temp <- c("42°C, 39°C, 34°C, 34°C, 30°C, 27°C")
Temp
## [1] "42°C, 39°C, 34°C, 34°C, 30°C, 27°C"

df <- data.frame(City, Temp)
df
##                               City
## 1 Tuguegarao City, Manila, Iloilo City, Tacloban, Samal Island ,Davao City
##                               Temp
## 1 42°C, 39°C, 34°C, 34°C, 30°C, 27°C

names(df) <- c("City", "Temperature")
names(df)
## [1] "City"          "Temperature"

str(df)
## 'data.frame':    1 obs. of  2 variables:
## $ City          : chr "Tuguegarao City, Manila, Iloilo City, Tacloban, Samal Island ,Davao City"
## $ Temperature: chr "42°C, 39°C, 34°C, 34°C, 30°C, 27°C"

df[3:4,]
##      City Temperature
## NA    <NA>         <NA>
```

```
## NA.1 <NA>          <NA>

matr <- matrix(c(1:8, 11:14), nrow = 3, ncol = 4, byrow = TRUE)
matr
##      [,1] [,2] [,3] [,4]
## [1,]    1    2    3    4
## [2,]    5    6    7    8
## [3,]   11   12   13   14

matrix(c(1:8, 11:14), nrow = 3, ncol = 4, byrow = TRUE)*2
##      [,1] [,2] [,3] [,4]
## [1,]    2    4    6    8
## [2,]   10   12   14   16
## [3,]   22   24   26   28

matrix(c(1:8,11:14),ncol=4,nrow=3)[2,]
## [1]  2  5  8 13

matrix(c(1:8,11:14),ncol=4,nrow=3)[1:2,c(3,4)]
##      [,1] [,2]
## [1,]    7   12
## [2,]    8   13

matrix(c(1:8,11:14),ncol=4,nrow=3)[3,c(2,3)]
## [1]  6 11

matrix(c(1:8,11:14),ncol=4,nrow=3)[,4]
## [1] 12 13 14

newmat <- matrix(c(1:8,11:14)*2,ncol=4,nrow=3)
rownames(newmat) <- c("isa","dalawa","tatlo")
colnames(newmat) <- c("uno","dos","tres","quatro")
newmat
##      uno dos tres quatro
## isa      2  8  14    24
## dalawa   4 10  16    26
## tatlo    6 12  22    28

dim(matr) <- c(6,2)
matr
##      [,1] [,2]
## [1,]    1    3
## [2,]    5    7
## [3,]   11   13
## [4,]    2    4
## [5,]    6    8
## [6,]   12   14

arr <- c(1, 2, 3, 6, 7, 8, 9, 0, 3, 4, 5, 1)
arr
## [1] 1 2 3 6 7 8 9 0 3 4 5 1

array3D <- array(arr, dim = c(2, 4, 3))
array3D
## , , 1
##
##      [,1] [,2] [,3] [,4]
```

```
## [1,] 1 3 7 9
## [2,] 2 6 8 0
##
## , , 2
##
##      [,1] [,2] [,3] [,4]
## [1,] 3 5 1 3
## [2,] 4 1 2 6
##
## , , 3
##
##      [,1] [,2] [,3] [,4]
## [1,] 7 9 3 5
## [2,] 8 0 4 1
```

```
dim(array3D)
## [1] 2 4 3
```

```
dimnames(array3D) <- list(c("a", "b"), LETTERS[1:4], c("1st-Dimensional Array", "2nd-Dimensional Array",
array3D
## , , 1st-Dimensional Array
##
##   A B C D
## a 1 3 7 9
## b 2 6 8 0
##
## , , 2nd-Dimensional Array
##
##   A B C D
## a 3 5 1 3
## b 4 1 2 6
##
## , , 3rd-Dimensional Array
##
##   A B C D
## a 7 9 3 5
## b 8 0 4 1
```