

# RWorksheet3A.rmd

2023-10-04

```
LETTERS<- c("A", "B", "C", "D", "E", "F", "G", "H", "I", "J", "K", "L", "M", "N", "O", "P", "Q", "R", "S", "T", "U", "V", "W", "X", "Y", "Z")
LETTERS

## [1] "A" "B" "C" "D" "E" "F" "G" "H" "I" "J" "K" "L" "M" "N" "O" "P" "Q" "R" "S"
## [20] "T" "U" "V" "W" "X" "Y" "Z"

letters<- c("a", "b", "c", "d", "e", "f", "g", "h", "i", "j", "k", "l", "m", "n", "o", "p", "q", "r", "s", "t", "u", "v", "w", "x", "y", "z")
letters

## [1] "a" "b" "c" "d" "e" "f" "g" "h" "i" "j" "k" "l" "m" "n" "o" "p" "q" "r" "s"
## [20] "t" "u" "v" "w" "x" "y" "z"

head(LETTERS,11)

## [1] "A" "B" "C" "D" "E" "F" "G" "H" "I" "J" "K"

indices <- c(1,3,5,7,9,11,13,15,17,19,21,23,25)
oddNumLetters <- LETTERS[indices]
print(oddNumLetters)

## [1] "A" "C" "E" "G" "I" "K" "M" "O" "Q" "S" "U" "W" "Y"

indices<- c(1,5,9,15,21)
selectedE<-LETTERS[indices]
print(selectedE)

## [1] "A" "E" "I" "O" "U"

tail(letters,5)

## [1] "v" "w" "x" "y" "z"

indeces<- c(16:23)
LetterBetween<-letters[indices]
print(LetterBetween)

## [1] "a" "e" "i" "o" "u"

city <- c("Tuguegarao City", "Manila", "Iloilo City", "Tacloban", "Samal Island", "Davao City")
city

## [1] "Tuguegarao City" "Manila" "Iloilo City" "Tacloban"
## [5] "Samal Island" "Davao City"

temp <- c("42", "39", "34", '34', "30", "27")
temp

## [1] "42" "39" "34" "34" "30" "27"

AprilAveTemp <- data.frame (
  city = c("Tuguegarao City", "Manila", "Iloilo", "Tacloban", "Samal Island", "Davao City"),
  temp = c(42, 39, 34, 34, 30, 27)
```

```

)
str(AprilAveTemp)

## 'data.frame': 6 obs. of 2 variables:
## $ city: chr "Tuguegarao City" "Manila" "Iloilo" "Tacloban" ...
## $ temp: num 42 39 34 34 30 27

colnames(AprilAveTemp)<- c("City", "Temperature")

print(AprilAveTemp)

##           City Temperature
## 1 Tuguegarao City         42
## 2           Manila         39
## 3           Iloilo         34
## 4           Tacloban        34
## 5      Samal Island        30
## 6           Davao City        27

#View(AprilAveTemp)

rows<-AprilAveTemp[c(3,4),]
rows

##           City Temperature
## 3      Iloilo             34
## 4 Tacloban              34

AprilAveTemp <- city

highestTemp <- max(AprilAveTemp)
highestTemp

## [1] "Tuguegarao City"

lowestTemp <- min(AprilAveTemp)
lowestTemp

## [1] "Davao City"

# Using Matrix
matrix(c(1:8,11:14), ncol=4, nrow=3)

##      [,1] [,2] [,3] [,4]
## [1,]   1   4   7  12
## [2,]   2   5   8  13
## [3,]   3   6  11  14

array(c(1:8,11:14), c(3,4,2))

## , , 1
##
##      [,1] [,2] [,3] [,4]
## [1,]   1   4   7  12
## [2,]   2   5   8  13
## [3,]   3   6  11  14
##
## , , 2
##

```

```
##      [,1] [,2] [,3] [,4]
## [1,]    1    4    7   12
## [2,]    2    5    8   13
## [3,]    3    6   11   14
```