

WORKSHEET#3

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R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
u_letters <- LETTERS
u_letters [1:11]
```

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

```
LETTERS[seq(1, 26, 2)]
```

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

```
vwls <- c("A", "E", "I", "O", "U")
vwls
```

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

```
l_letters <- letters
l_letters [22:26]
```

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

```
vec_letters <- letters
vec_letters [16:23]
```

```
## [1] "p" "q" "r" "s" "t" "u" "v" "w"
```

```
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
```

```
c_temp <- cbind(c("Tuguegarao city", "Manila", "Iloilo City", "Tacloban", "Samal Island", "Davao City"),
               c(42, 39, 34, 34, 30, 27))
c_temp
```

```
##      [,1]      [,2]
## [1,] "Tuguegarao city" "42"
## [2,] "Manila"          "39"
## [3,] "Iloilo City"     "34"
## [4,] "Tacloban"        "34"
## [5,] "Samal Island"    "30"
## [6,] "Davao City"      "27"
```

```
colnames(c_temp) <- c("city", "temp")
c_temp
```

```
##      city      temp
## [1,] "Tuguegarao city" "42"
## [2,] "Manila"          "39"
## [3,] "Iloilo City"     "34"
## [4,] "Tacloban"        "34"
## [5,] "Samal Island"    "30"
## [6,] "Davao City"      "27"
```

```
c_temp [5]
```

```
## [1] "Samal Island"
```

```
c_temp [6]
```

```
## [1] "Davao City"
```

```
num_matrix <- matrix(c(1:8, 11:14), nrow = 3, ncol = 4)
num_matrix
```

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

```
m <- matrix(c(1:8, 11:14), nrow = 3, ncol = 4)
m <- 2*m
m
```

```
##      [,1] [,2] [,3] [,4]
## [1,]    2    8   14   24
## [2,]    4   10   16   26
## [3,]    6   12   22   28
```

```
m[2,]
```

```
## [1]  4 10 16 26
```

```
m[1, 3]
```

```
## [1] 14
```

```
m[2, 4]
```

```
## [1] 26
```

```
m[3, 2]
```

```
## [1] 12
```

```
m[3, 3]
```

```
## [1] 22
```

```
m[,4]
```

```
## [1] 24 26 28
```

```
dimnames(m) <- list(c("isa", "dalawa", "tatlo"), c("uno", "dos", "tres", "quatro"))
m
```

```
##      uno dos tres quatro
## isa    2   8  14    24
## dalawa 4  10  16    26
## tatlo  6  12  22    28
```

```
dim(num_matrix) <- c(6, 2)
num_matrix
```

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

```
num <- c(1, 2, 3, 6, 7, 8, 9, 0, 3, 4, 5, 1)
num_array <- array(rep(num, 2), dim = c(2,4,3))
num_array
```

```
## , , 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
```

```
dimnames(num_array) <- list(c("a", "b"), c("A", "B", "C", "D"),
                             c("1st-Dimensional Array", "2nd-Dimensional Array",
                               "3rd-dimensional Array"))
num_array
```

```
## , , 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
```

Including Plots

You can also embed plots, for example:



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.