RWORKSHEET#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:

```
eleven_letters <- LETTERS [1:11]</pre>
eleven_letters
    [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"
vowels <- c("A", "E", "I", "O", "U")</pre>
vowels
## [1] "A" "E" "I" "O" "U"
last_letters <- letters [22:26]</pre>
last_letters
## [1] "v" "w" "x" "v" "z"
low_letters <- letters [16:23]</pre>
low_letters
## [1] "p" "q" "r" "s" "t" "u" "v" "w"
vec_city <- c("Tuguegarao City", "Manila", "Iloilo City", "Tacloban", "Samal Island", "Davao City")
vec_city
## [1] "Tuguegarao City" "Manila"
                                             "Iloilo City"
                                                                "Tacloban"
## [5] "Samal Island"
                          "Davao City"
```

```
cel_temperature <- c(42, 39, 34, 34, 30, 27)
cel_temperature
## [1] 42 39 34 34 30 27
city_temp <- cbind(c("Tuguegarao city", "Manila", "Iloilo City", "Tacloban", "Samal Island", "Davao Cit</pre>
                   c(42, 39, 34, 34, 30, 27))
city_temp
        [,1]
                           [,2]
## [1,] "Tuguegarao city" "42"
## [2,] "Manila"
                          "39"
## [3,] "Iloilo City"
                           "34"
## [4,] "Tacloban"
                           "34"
## [5,] "Samal Island"
                          "30"
                          "27"
## [6,] "Davao City"
colnames(city_temp) <- c("city","temperature")</pre>
city_temp
##
        city
                          temperature
## [1,] "Tuguegarao city" "42"
## [2,] "Manila"
                          "39"
## [3,] "Iloilo City"
                           "34"
## [4,] "Tacloban"
                           "34"
## [5,] "Samal Island"
                          "30"
## [6,] "Davao City"
                           "27"
city_temp [5]
## [1] "Samal Island"
city_temp [6]
## [1] "Davao City"
create_matrix \leftarrow matrix(c(1:8, 11:14), nrow = 3, ncol = 4)
create_matrix
        [,1] [,2] [,3] [,4]
## [1,]
## [2,]
           2
                5
                     8
                          13
## [3,]
         3
              6 11
                         14
mul_matrix <- matrix(c(1:8, 11:14), nrow = 3, ncol = 4)</pre>
mul_matrix <- 2*mul_matrix</pre>
mul_matrix
```

```
## [,1] [,2] [,3] [,4]
## [1,]
             8 14
## [2,]
          4
              10
                   16
                        26
## [3,]
          6
              12
                   22
                        28
mul_matrix[2,]
## [1] 4 10 16 26
mul_matrix[1, 3]
## [1] 14
mul_matrix[2, 4]
## [1] 26
mul_matrix[3, 2]
## [1] 12
mul_matrix[3, 3]
## [1] 22
mul_matrix[,4]
## [1] 24 26 28
dimnames(mul_matrix) <- list(c("isa", "dalawa", "tatlo"), c("uno", "dos", "tres", "quatro"))</pre>
mul_matrix
##
         uno dos tres quatro
          2 8 14
## isa
                          24
## dalawa 4 10
                   16
                          26
## tatlo
         6 12 22
                          28
dim(mul_matrix) \leftarrow c(6,2)
mul_matrix
##
       [,1] [,2]
## [1,]
          2
             14
## [2,]
              16
        6
## [3,]
              22
## [4,]
        8
             24
## [5,]
       10
              26
## [6,]
       12
              28
```

```
num_values <- c(1, 2, 3, 6, 7, 8, 9, 0, 3, 4, 5, 1)
num_array \leftarrow array(rep(num_values, 2), dim = c(2,4,3))
num_array
## , , 1
##
##
      [,1] [,2] [,3] [,4]
       1 3 7 9
## [1,]
## [2,]
       2 6
##
## , , 2
##
## [,1] [,2] [,3] [,4]
## [1,]
          3
             5 1
## [2,]
         4
                   2
             1
##
## , , 3
##
##
      [,1] [,2] [,3] [,4]
## [1,]
         7 9 3
## [2,]
        8
              0
                   4
                        1
dimnames(num_array) <- list(letters[1:2],LETTERS[1:4],</pre>
                    c("1st-Dimensional Array", "2nd-Dimensional Array",
                       "3rd-dimensional Array"))
num_array
## , , 1st-Dimensional Array
##
##
   ABCD
## 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 \mbox{echo} = FALSE parameter was added to the code chunk to prevent printing of the R code that generated the plot.