Rworksheet#3A_Sapan.rmd

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2025-10-13

```
# USING VECTORS
# 1a

LETTERS[1:11]

# 1b

LETTERS[seq(1, 26, by = 2)]

# 1c

LETTERS[c(1, 5, 9, 15, 21)]

# 1d

letters[22:26]

# 1e

letters[15:24]


# USING DATA FRAMES (Temperatures)

# 2a

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

# 2b

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

# 2c

df <- data.frame(city, temp)
df

# 2d

names(df) <- c("City", "Temperature")
```

```r
df

# 2e

str(df)

# 2f

df[3:4, ]

# 2g

df[which.max(df$Temperature), ]
df[which.min(df$Temperature), ]



# USING MATRICES

# 2a.)

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

# 2b.)

mat2 <- mat * 2
mat2

# 2c.)

mat[2, ]

# 2d.)

mat[1:2, 3:4]

# 2e.)

mat[3, 2:3]

# 3f

mat[, 4]

# 2g.)

rownames(mat2) <- c("isa", "dalawa", "tatlo")
colnames(mat2) <- c("uno", "dos", "tres", "quatro")
mat2

# 2h.)
```

```r
dim(mat) <- c(6, 2)
mat



# USING ARRAYS

# 3a.)

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


# 3b.)

dim(my_array)
length(dim(my_array))


# 3c.)

rownames(my_array) <- letters[1:2]
colnames(my_array) <- LETTERS[1:4]
dimnames(my_array)[[3]] <- c("1st-Dimensional Array", "2nd-Dimensional Array", "3rd-Dimensional Array")
my_array
```