RWorksheet_Pineda#3a.Rmd

2023-10-04

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.

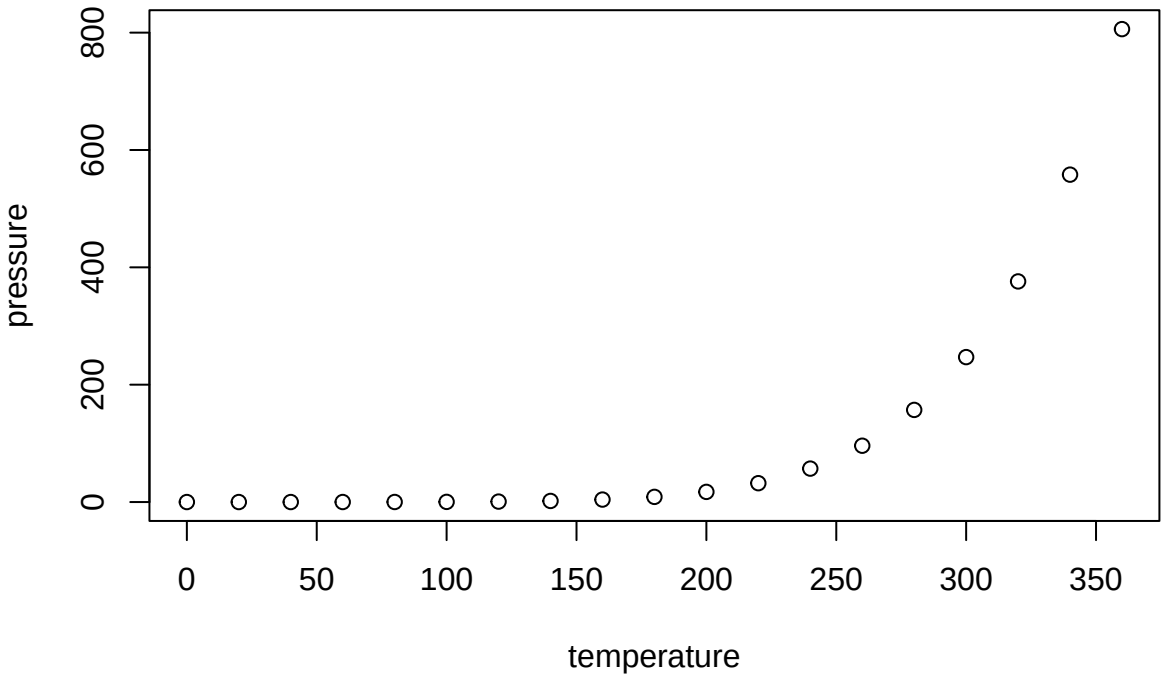
When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
summary(cars)
```

```
##      speed           dist       
##  Min.   : 4.0   Min.   :  2.00  
##  1st Qu.:12.0   1st Qu.: 26.00  
##  Median :15.0   Median : 36.00  
##  Mean   :15.4   Mean   : 42.98  
##  3rd Qu.:19.0   3rd Qu.: 56.00  
##  Max.   :25.0   Max.   :120.00
```

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.

LETTERS #1LETTERS Vector #a. First11 <- LETTERS[c(1:11)] First11

#b. LengthLETTERS <- length(LETTERS) NumOdd <- LETTERS[seq(LengthLETTERS) %% 2 == 1] NumOdd

#c. Vowels <- LETTERS[c(1, 5, 9, 15, 21)] Vowels

letters #letters Vector #d. Last5 <- letters[c(22:26)] Last5

#e. Fifteenthto24 <- letters[c(15:24)] Fifteenthto24

#2.a City <- c("Tuguegarao City", "Manila", "Iloilo City", "Tacloban", "Samal Island", "Davao City") City

#b. Temp <- c(42, 39, 34, 34, 30, 27) Temp

#c. City_Temp <- data.frame(City,Temp) City_Temp

#d. names(City_Temp) <- c("City", "Temperature") City_Temp

str(City_Temp) #The code displayed the structure of the City_Temp object #It displayed the contents of the data frame #It displayed the summary of the data frame

#f. TwoRows <- City_Temp[3:4,]

#g. Highest <- City_Temp[which.max(City_Temp$Temperature),] Highest

Lowest <- City_Temp[which.min(City_Temp$Temperature),] Lowest

#Matrices #2.a Matr <- matrix (c(1:8, 11:14), nrow = 3, ncol = 4) Matr

#b. MulMatr <- matr * 2 MulMatr

#c. RowTwo <- MulMatr[2,] RowTwo

#d. TwoColsandRows <- MulMatr[c(1,2),c(3,4)] TwoColsandRows

#e. TwoColsandRows <- MulMatr[3, c(2,3)] TwoColsandRows

#f. Cols4 <- MulMatr[,4] Cols4

#g. dimnames(MulMatr) <- list(c("isa", "dalawa", "tatlo"), c("uno", "dos", "tres"," quatro"))

MulMatr

#h. Matr dim(Matr) <- c(6,2) Matr

#Arrays #3.a Values <- c(1, 2, 3, 6, 7, 8, 9, 0, 3, 4, 5, 1) rep_values <- rep(Values, each = 2)

arr <- array(rep_values, dim = c(2,4,3)) arr

#3.b #three dimensions

#3.c dimnames(arr) <-list(letters[1:2], # row names LETTERS[1:4], # col names c("1st-Dimensional Array", "2nd-Dimensional Array","3rd-Dimensional Array") # dim names)

arr