RWorksheet_Porras3a

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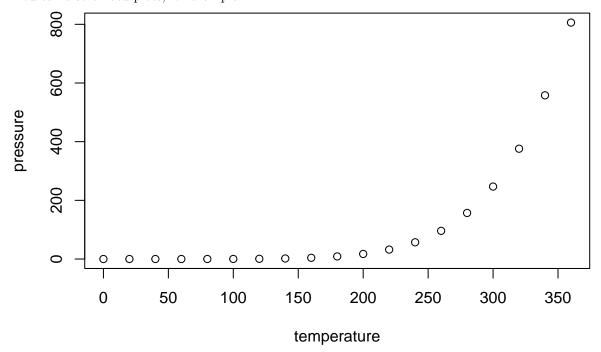
When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```r
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.

#Built in vectors LETTERS letters

#LETTERS A first_11 <-LETTERS[c(1:11)] first_11

b.

lenLet <- length(LETTERS) oddNum <- LETTERS[seq(lenLet) %% 2 == 1] oddNum

c

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

#letters vector # d letters

last5 <- letters[c(22:26)] last5

e

fifto24 <- letters[c(15:24)] fifto24

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

e

str(city_temp)

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

USING MATRIXES

2 a

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

b

mulMatr <- matr * 2 mulMatr

c

rowTwooo <- mulMatr[2,] rowTwooo

d

twoColsAndRows <- mulMatr[c(1,2),c(3,4)] twoColsAndRows

e

twoColsOneRow <- mulMatr[3,c(2,3)] twoColsOneRow

f

fourCol <- mulMatr[,4] fourCol

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)