

Assigment

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13/09/2020

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>.

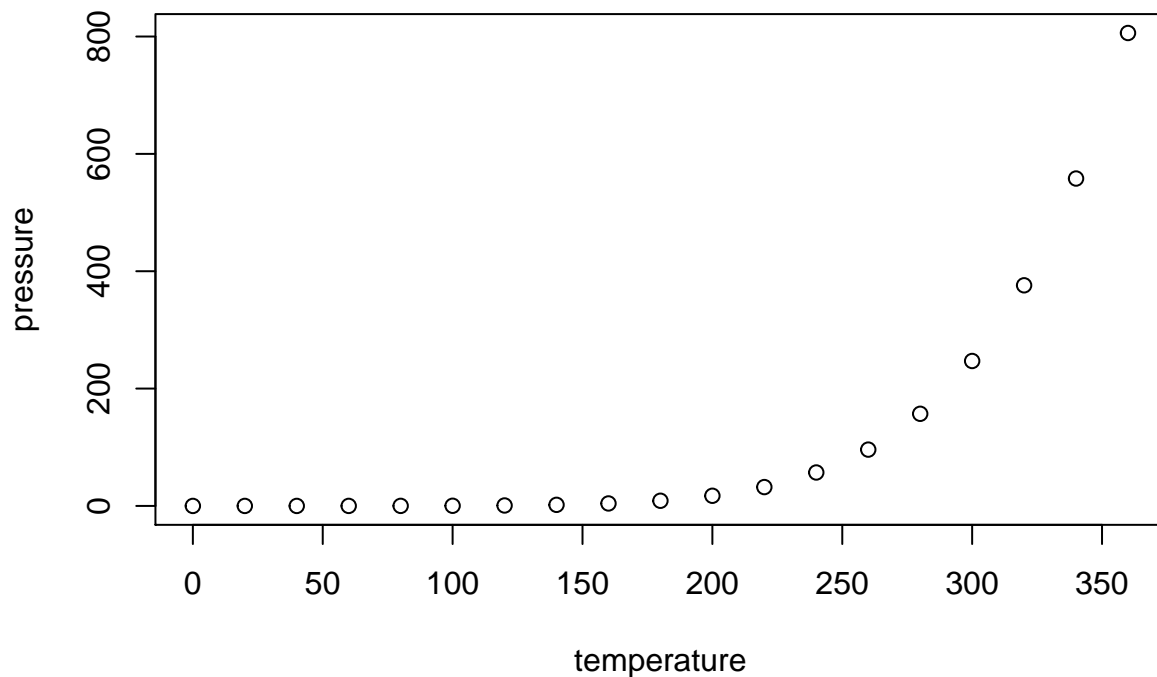
When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
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.

set working directory

```
setwd('ProgAssignment3-data/')
```

read csv data

```
hospitaldata <- read.csv('hospital-data.csv') outcome <- read.csv("outcome-of-care-measures.csv", colClasses = "character")
```

check outcome data

```
head(outcome) nrow(outcome) names(outcome)
```

make hist plot from col "Hospital.30.Day.Death..Mortality..Rates.from.Heart."

```
outcome[, 11] <- as.numeric(outcome[, 11]) hist(outcome[, 11])
```

Finding the best hospital in a state

Handling ties. If there is a tie for the best hospital for a given outcome, then the hospital names should be sorted in alphabetical order and the first hospital in that set should be chosen (i.e. if hospitals "b", "c", and "f" are tied for best, then hospital "b" should be returned). The function should use the following template.

```
best <- function(state, outcome) { ## Read outcome data outcome <- read.csv("outcome-of-care-measures.csv", colClasses = "character")
```

```
## Check that state and outcome are valid
if (!(state %in% data$State)) {
  result <- "invalid state"
}
```

```
## Return hospital name in that state with lowest 30-day death
```

```
## rate
}
```

```
outcome[, 11] <- sapply(outcome[, 11], as.numeric) outcomeclean <- na.omit(outcome[11])
```

```
?na.omit
```

```
new <- outcome[outcome[, 11] != is.na(outcome[11])]
```

```
new <- subset(outcome, colnames(outcome[11]) == 'Not Available')
```

```
summary(outcome) sapply(outcome, class) data <- subset(outcome, State == "TX" & colnames(outcome)[11]
== numeric(3), select = c(colnames(outcome[2]), colnames(outcome[11]))) data mean(data, na.rm = TRUE)
subset(mindata, ) subset(outcome, State == 'TX', select=c(City, County.Name))
```