

## 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>.

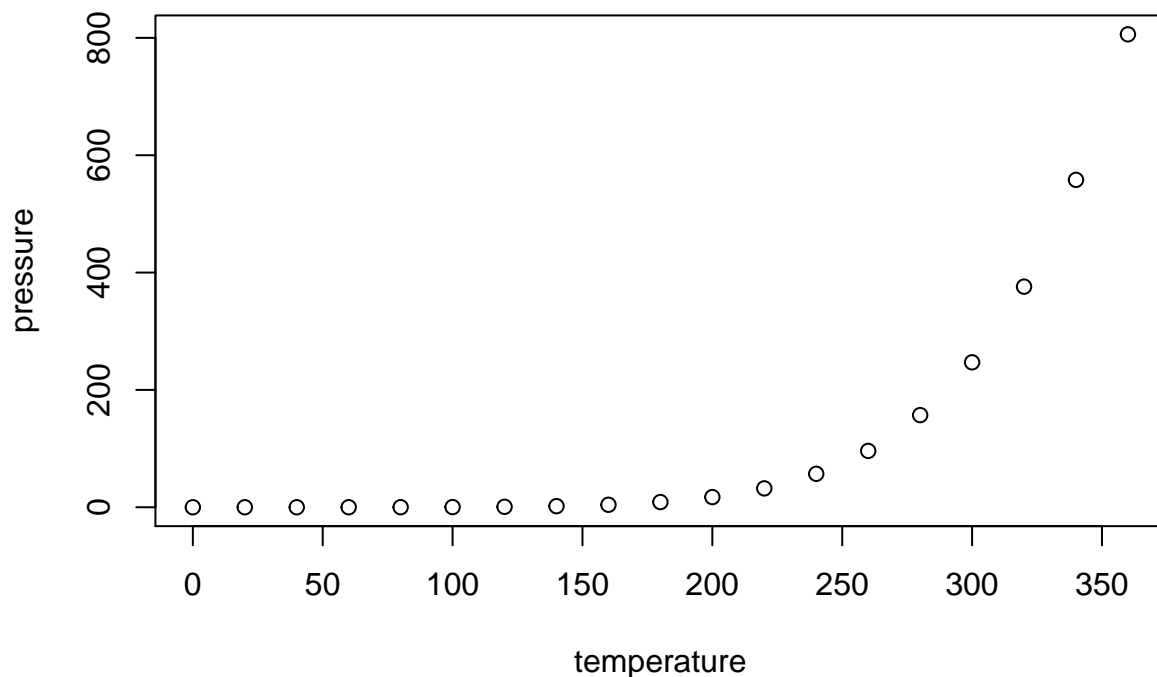
When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
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.

```
data<-read.csv('c:/Users/Administrator/Desktop/UniversalBank.csv') library(caret) inTrain = createDataPartition(1:nrow(data), p = 0.6, list = FALSE) train<-data[inTrain,] test<-data[-inTrain,] library(class)
pred<-knn(train[,c(-1,-5,-10)], test[,c(-1,-5,-10)],train$Personal.Loan)$confusionMatrix(factor(test$Personal.Loan),factor(pred))
confusionMatrix(factor(rep(0,nrow(test))),factor(test$Personal.Loan))

find.k<-function(k){ pred<-knn(train[,c(-1,-5,-10)], test[,c(-1,-5,-10)],train$Personal.Loan,k = k)$perf <-
  confusionMatrix(factor(test$Personal.Loan),factor(pred)) return(perf$byClass) } res<-sapply(1:15,find.k)
plot(1:15,res[2,],type='l') res
```