

Untitled

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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>.

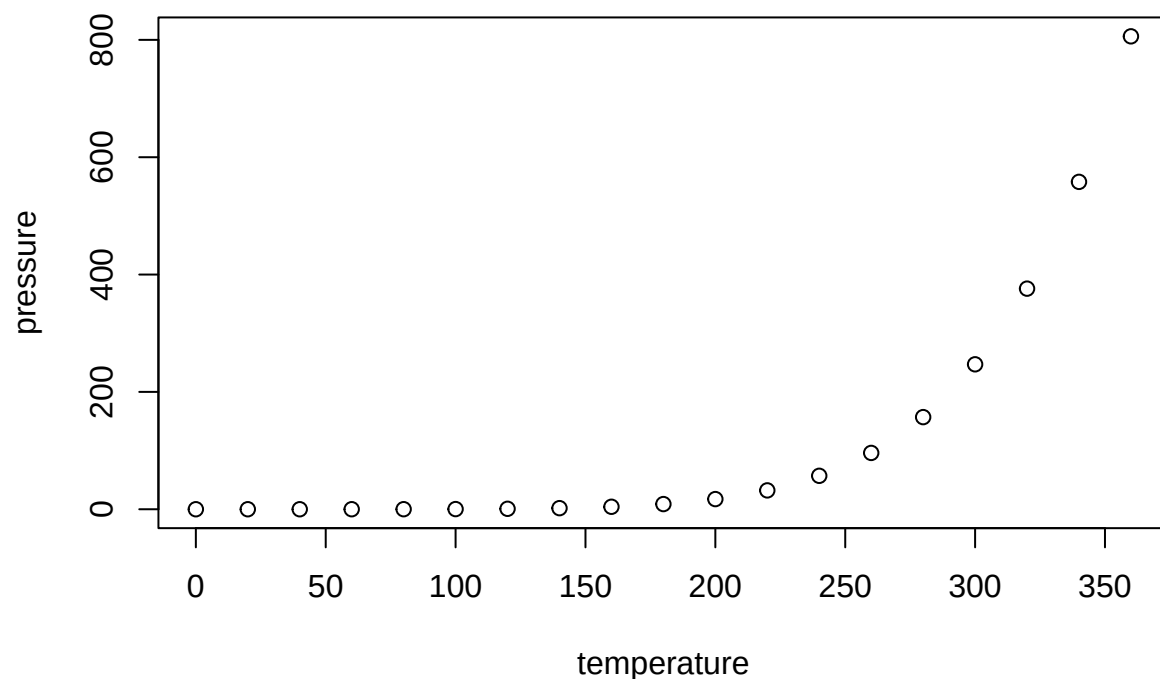
When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
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.

```
library(gapminder)
mean(gapminder$lifeExp)
```

```
## [1] 59.47444
```

```
median(gapminder$lifeExp)
```

```
## [1] 60.7125
```

```
getmode <- function(v) {
  uniqv <- unique(v)
  uniqv[which.max(tabulate(match(v, uniqv)))]
}
getmode(gapminder$continent)
```

```
## [1] Africa
## Levels: Africa Americas Asia Europe Oceania
```

```
#variance
```

```
var(gapminder$lifeExp)
```

```
## [1] 166.8517
```

```
#standard
```

```
sd(gapminder$lifeExp)
```

```
## [1] 12.91711
```

```
#range
```

```
range(gapminder$lifeExp)
```

```
## [1] 23.599 82.603
```

```
summary(gapminder$lifeExp)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      23.60  48.20   60.71   59.47   70.85   82.60
```

```
IQR(gapminder$lifeExp)
```

```
## [1] 22.6475
```

```
library(dplyr)
```

```
##
```

```
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
```

```
##
```

```
##      filter, lag
```

```
## The following objects are masked from 'package:base':
```

```
##
```

```
##      intersect, setdiff, setequal, union
```

```
gapminder %>%
```

```
  group_by(continent) %>%
```

```
  summarise(mean_lifeExp = mean(lifeExp),
```

```
            sd_lifeExp = sd(lifeExp))
```

```
## # A tibble: 5 x 3
```

```
##   continent mean_lifeExp sd_lifeExp
```

```
##   <fct>         <dbl>         <dbl>
```

```
## 1 Africa         48.9           9.15
```

```
## 2 Americas       64.7           9.35
```

```
## 3 Asia           60.1          11.9
```

```
## 4 Europe         71.9           5.43
```

```
## 5 Oceania        74.3           3.80
```