Emax Corporation

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```
library(lpSolveAPI)
emax <- read.lp("emax_corp.lp")
emax
```

```
## Model name:
##              P   y1p   y1m   y2m    x1    x2    x3   y2p
## Maximize     1    -6    -6    -3     0     0     0     0
## R1          -1     0     0     0    20    15    25     0  =   0
## R2           0    -1     1     0     6     4     5     0  =  50
## R3           0     0     0     1     5     7     8    -1  =  55
## Kind       Std   Std   Std   Std   Std   Std   Std   Std
## Type      Real  Real  Real  Real  Real  Real  Real  Real
## Upper      Inf   Inf   Inf   Inf   Inf   Inf   Inf   Inf
## Lower        0     0     0     0     0     0     0     0
```

```
solve(emax)
```

```
## [1] 0
```

```
get.objective(emax)
```

```
## [1] 250
```

```
get.variables(emax)
```

```
## [1] 250   0   0   0   0   0  10  25
```

#the objective function is 250. y1p = 0, y1m = 0, y2m = 0, x1 = 0, x2 = 0, x3 = 10, y1p = 25. This implies that y1 = 0 and y2 = 0, so the first and second goals are fully satisfied, the earnings are exceeded by $25mil but there is no penalty for exceeding earnings.

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.

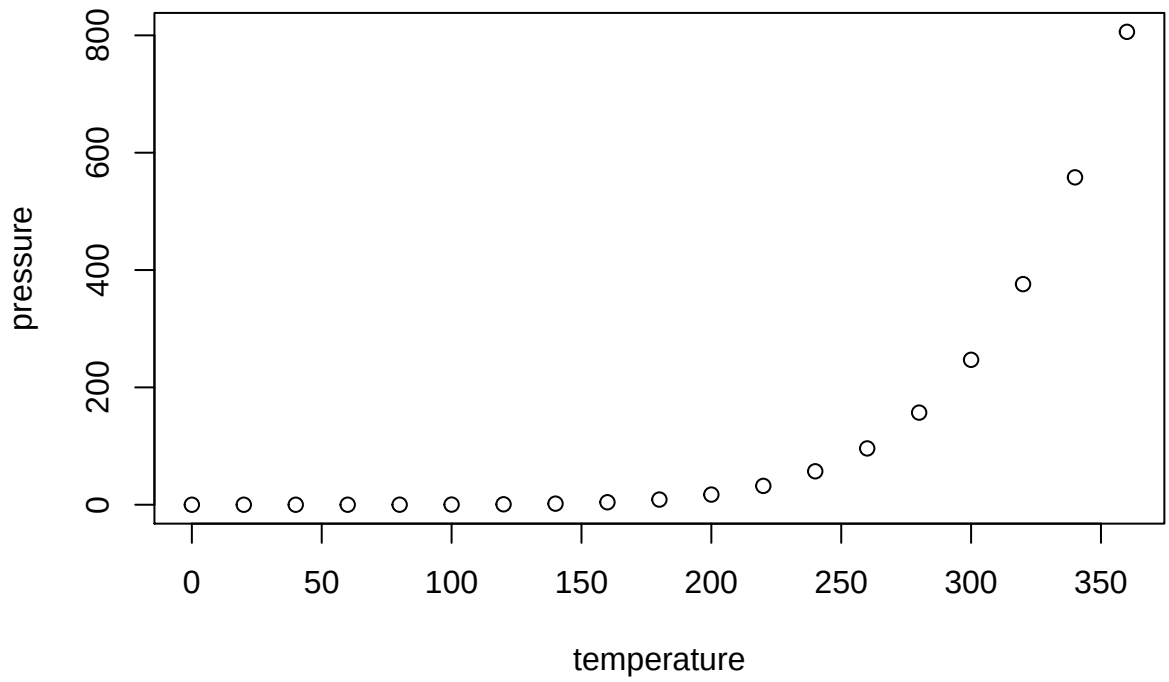
When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
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.