Wiglet

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```r
{r setup, include=FALSE} knitr::opts_chunk$set(echo = TRUE)


library(lpSolveAPI)
#make an lp object with 0constraints and 9 decision variables
lprec1 <- make.lp(0, 9)

#create obj function
set.objfn(lprec1, c(420,360,300,420,360,300,420,360,300))

#change direction to set maximum
lp.control(lprec1,sense = "max")

# Add the Plant constraints
add.constraint(lprec1, c(1,1,1,0,0,0,0,0,0), "<=", 750)
add.constraint(lprec1, c(0,0,0,1,1,1,0,0,0), "<=", 900)
add.constraint(lprec1, c(0,0,0,0,0,0,1,1,1), "<=", 450)
add.constraint(lprec1, c(20,15,12,0,0,0,0,0,0), "<=", 13000)
add.constraint(lprec1, c(0,0,0,20,15,12,0,0,0), "<=", 12000)
add.constraint(lprec1, c(0,0,0,0,0,0,20,15,12), "<=",  5000)
add.constraint(lprec1, c(1,0,0,1,0,0,1,0,0), "<=", 900)
add.constraint(lprec1, c(0,1,0,0,1,0,0,1,0), "<=", 1200)
add.constraint(lprec1, c(0,0,1,0,0,1,0,0,1), "<=", 750)
add.constraint(lprec1, c(900,900,900,-750,-750,-750,0,0,0), "=", 0)
add.constraint(lprec1, c(450,450,450,0,0,0,-750,-750,-750), "=", 0)

#set variable names and name the constraints
lp.rownames<- c("cap1", "cap2", "cap3", "storage1", "storage2", "storage3", "sales1", "sales2","sales3
lp.colnames <- c("l1","m1", "s1","l2", "m2", "s2","l3", "m3", "s3")
dimnames(lprec1) <- list(lp.rownames, lp.colnames)
lprec1

solve(lprec1)
```

The output above doesn't indicate that the answer is 0, but that there was a successful solution. We now output the value of the objective function, and the variables

```r
get.objective(lprec1)
get.variables(lprec1)
```

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 cars} summary(cars)
```

Including Plots

You can also embed plots, for example:

```
{r pressure, echo=FALSE} plot(pressure)
```

Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.