

rspake1_Quant_Final

Ryan Spake

12/11/2021

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> (<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:

```
library(lpSolveAPI)
```

```
## Warning: package 'lpSolveAPI' was built under R version 4.1.1
```

```
Ip_staff <- read.lp("C:/Users/rspake1/Desktop/Final_Quant_Exam.lp")
```

```
Ip_staff
```

```
## Model name:  
##   a linear program with 48 decision variables and 28 constraints
```

```
solve(Ip_staff)
```

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

```
get.objective(Ip_staff)
```

```
## [1] 267
```

```
get.variables(Ip_staff)
```

```
## [1] 0 0 1 0 0 1 0 0 0 0 1 0 0 1 0 0 0 0 0 1 0 0 0 1 1 0 0 0 1 0 0 0 0 1 0 0 0 0  
## [39] 0 1 0 0 1 0 1 0 0 0
```

```
get.constraints(Ip_staff)
```

##	[1]	8.6	10.2	9.6	8.9	210.8	232.7	201.7	219.5	278.9	245.1	226.6	245.0
##	[13]	3.0	3.0	3.0	3.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
##	[25]	1.0	1.0	1.0	1.0								