rspake1_Quant_Final

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Final Exam - Student Allocation

In this assignment, we are tasked with assigning 12 students to four groups, 3 students to a group, and based off of three factors that we decide.

```
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 1 0 0 0 1 1 0 0 0 1 0 0 0 0 1 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
```