jstadden_11

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```r
library(lpSolveAPI)
```

```
## Warning: package 'lpSolveAPI' was built under R version 3.6.3
```

```r
x<-read.lp("jstadden_11.lp")
x
```

```
## Model name:
##            Shift1  Shift2  Shift3  Shift4  Shift5  Shift6  Shift7
## Minimize     775     800     800     800     800     775     750
## Sunday         0       1       1       1       1       1       0  >=  18
## Monday         0       0       1       1       1       1       1  >=  27
## Tuesday        1       0       0       1       1       1       1  >=  22
## Wednesday      1       1       0       0       1       1       1  >=  26
## Thursday       1       1       1       0       0       1       1  >=  25
## Friday         1       1       1       1       0       0       1  >=  21
## Saturday       1       1       1       1       1       0       0  >=  19
## Kind         Std     Std     Std     Std     Std     Std     Std
## Type         Int     Int     Int     Int     Int     Int     Int
## Upper        Inf     Inf     Inf     Inf     Inf     Inf     Inf
## Lower          0       0       0       0       0       0       0
```

```r
solve(x)
```

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

```r
get.objective(x)
```

```
## [1] 25675
```

```r
get.variables(x)
```

```
## [1]  2  4  5  0  8  1 13
```

The total cost is $25,675

The following is the number of people assigned to each shift:
Shift 1: 2
Shift 2: 4
Shift 3: 5
Shift 4: 0
Shift 5: 8

Shift 6: 1
Shift 7: 13

That means this many people would be scheduled to work each day:
Sunday: 18
Monday: 27
Tuesday: 24
Wednesday: 28
Thursday: 25
Friday: 24
Saturday: 19