ASSIGNMENT 6

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```
library(lpSolve)
library(lpSolveAPI)
L <- read.lp("C://Users//heere//OneDrive//Documents//QMM//ASSIGNMENT 6//ap.lp")
## Model name:
             x1
                  x2
                      xЗ
                           x4
                               x5
                                    x6
                                         x7
## Minimize
           775 800
                      800
                          800
                              800
                                   775
                                        750
## Sunday
                       1
                                          0
                                                18
## Monday
              0
                   0
                                                27
                       1
                            1
                                 1
                                     1
                                          1
                                            >=
## Tuesday
                   0
                       0
                            1
                                1
                                                22
              1
                                     1
                                          1
## Wednesday
              1
                   1
                       0
                            0
                                1
                                          1
                                                26
## Thursday
              1
                   1
                       1
                                          1
                                                25
## Friday
                                0
                                               21
                   1
                       1
                            1
                                     0
                                          1
              1
## Saturday
                                1
              1
                   1
            Std Std Std Std Std Std Std
## Kind
## Type
            Int Int
                     Int
                          Int
                              Int
                                   Int
                                        Int
## Upper
            Inf
                 Inf
                      Inf
                          Inf
                               Inf
                                   Inf
                                        Inf
## Lower
                   0
                       0
                            0
                                0
solve(L)
## [1] 0
get.objective(L)
## [1] 25675
#Total cost for the minimum wage is $25,675.
get.variables(L)
## [1] 2 4 5 0 8 1 13
colnames(tbl)<- c('Sun/Mon', 'Mon/Tue', 'Tue/Wed', 'Wed/Thur', 'Thur/Fri', 'Fri/Sat', 'Sat/Sun')</pre>
row.names(tbl) <- c('Sunday', 'Monday', 'Tuesday', 'Wednesda', 'Thursday', 'Friday', 'Saturday')
tbl
```

##		Sun/Mon	Mon/Tue	Tue/Wed	Wed/Thur	Thur/Fri	Fri/Sat	Sat/Sun
##	Sunday	0	4	5	0	8	1	0
##	Monday	0	0	5	0	8	1	13
##	Tuesday	2	0	0	0	8	1	13
##	${\tt Wednesda}$	2	4	0	0	8	1	13
##	Thursday	2	4	5	0	0	1	13
##	Friday	2	3	4	0	0	0	13
##	Saturday	2	4	5	0	8	0	0

#In order to get the optimal choice that lowers the overall pay expense, I entered the lp model variable rowSums(tbl)

```
## Sunday Monday Tuesday Wednesda Thursday Friday Saturday ## 18 27 24 28 25 22 19
```

#Based on the shift arrangement that lowers the overall salary cost, this figure shows the number of em