## Goal

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```
library(lpSolveAPI)
goal <- read.lp("C:/Users/12349/Documents/goal.lp")</pre>
solve(goal)
## [1] 0
# Print the model
goal
## Model name:
               x1
                      x2
                            xЗ
                                y1p
                                        y1m
                                              y2m
                                                     y2p
## Maximize
                            25
                                  -6
               20
                      15
                                        -6
                                               -3
                6
                                  -1
                                          1
                                                             50
                       7
                                                             75
## R2
                 8
                                          0
                                                1
## Kind
              Std
                    Std
                           Std
                                 Std
                                        {\tt Std}
                                              Std
                                                     Std
## Type
             Real
                   Real
                          Real
                                Real
                                       Real
                                             Real
                                                    Real
## Upper
              Inf
                     Inf
                           Inf
                                 Inf
                                        Inf
                                                     Inf
                                              Inf
                 0
                       0
                                    0
                                          0
## Lower
                             0
                                                0
                                                       0
# To identify the Optimal Solution
get.objective(goal)
## [1] 225
library(lpSolveAPI)
preemptive_goal<- read.lp("C:/Users/12349/Documents/preemptives.lp")</pre>
solve(preemptive_goal)
## [1] 0
# Print the model
preemptive_goal
```

```
## Model name:
##
      x1 x2 x3 y1p y1n y2n
                                       у2р
## Maximize
           20 15
                     25 -6
                             -6
                                 -3
## R1
           6
                4
                     5
                        -1
                              1
                                  0
                                        0 = 50
## R2
                 7
                     5
                                       -1 = 75
           8
                          0
                               0
                                   1
## Kind
              Std
          Std
                    Std
                        Std
                            Std
                                 Std
                                       Std
## Type
          Real Real Real Real Real
                                      Real
## Upper
           Inf
               Inf
                    Inf
                         Inf
                             Inf
                                  Inf
                                       Inf
## Lower
                 0
                     0
                         0
                             0
                                   0
                                        0
            0
```

## # To identify the optimal solution

get.objective(preemptive\_goal)

## [1] 225