

# Test matching.R function

Test functions in matching.R file

Test generateAssignmentMatrix(payoffs,quotaU,quotaD)

```
payoffMatrix <- matrix(c(910.41, 707.28, 706.35, 621.92, 726.38, 960.84,
  754.13, 764.83, 801.89, 701.89, 653.25, 719.04, 799.99, 774.68,
  835.48, 806.28, 686.7, 681.97, 604.14, 723.23, 886.22, 734.38,
  747.58, 770.07, 675.69, 642.93, 693.31, 784.32, 742.03,
  803.43,1271.07, 720.4, 684.3, 603.58, 728.8, 1176.88, 730.83,
  770.25, 862.68, 669.13, 646.01, 733.68, 776.64, 879.02,
  863.36,874.13, 657.26, 637.2, 565.54, 700.17, 905.53, 690.04,
  720.91, 753.48, 623.97, 615.22, 660.75, 744.59, 744.02,
  770.05,1031.32, 715.69, 691.15, 610.02, 749.09, 1033.23, 744.3,
  779.32, 827.8, 677.75, 659.65, 723.39, 798.59, 824.87, 842.86),nrow=5,ncol=15,byrow=TRUE)
```

```
generateAssignmentMatrix(payoffMatrix,3,1)
```

```
## $`1`
## [1] 0 0 1 0 0 0 0 0 0 1 0 1 0 0 0
##
## $`2`
## [1] 0 0 0 1 0 0 1 0 0 0 0 0 1 0 0
##
## $`3`
## [1] 1 0 0 0 0 1 0 0 0 0 0 0 0 1 0
##
## $`4`
## [1] 0 0 0 0 1 0 0 1 0 0 1 0 0 0 0
##
## $`5`
## [1] 0 1 0 0 0 0 0 0 1 0 0 0 0 0 1
## [1] "Test Result: SUCCESS"
```

```
generateAssignmentMatrix(payoffMatrix,1,1)
```

```
## $`1`
## [1] 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1
##
## $`2`
## [1] 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0
##
## $`3`
## [1] 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0
##
## $`4`
## [1] 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0
##
## $`5`
## [1] 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0
```

```
## [1] "Test Result: SUCCESS"
generateAssignmentMatrix(payoffMatrix,3,2)

## $`1`
## [1] 0 0 0 0 0 0 0 0 1 0 0 0 1 0 1
##
## $`2`
## [1] 0 0 0 0 0 0 1 1 0 0 0 0 1 0 0
##
## $`3`
## [1] 1 0 0 0 0 1 0 0 0 0 0 0 0 1 0
##
## $`4`
## [1] 0 0 0 0 0 0 0 1 1 0 0 0 0 0 1
##
## $`5`
## [1] 1 0 0 0 0 1 0 0 0 0 0 0 0 1 0
## [1] "Test Result: SUCCESS"
```

## Test CmatchMatrix(payoffMatrix,quotaU,quotaD)

```
#Load Libraries and functions
setwd("C:/Users/Christina/Desktop/mse-r/MSE-R")
source("mse.R")
#Import file
filename<-"import/precomp_testdata.dat"
x<-import(filename)
g(header,noM,noU,noD,noAttr,distanceMatrices,matchMatrix,mate)%=%x

#Create payoffMatrix
Cx<-Cx(noAttr)
payoffMatrix<-CpayoffMatrix(noM,noU,noD,Cx,distanceMatrices,noAttr)

#Assign payoffMatrix numerical values (set x's)
xval<-c(1, 2, 1.5, 2.3)
payoffMatrix<-assignpayoffMatrix(payoffMatrix,xval)

#Create matchMatrix
CmatchMatrix(payoffMatrix,2,1)

## [[1]]
## [[1]]$`1`
## [1] 0 0 0 0 0 0 0 0 1 0
##
## [[1]]$`2`
## [1] 0 0 0 1 0 1 0 0 0 0
##
## [[1]]$`3`
## [1] 0 0 0 0 0 0 0 0 0 0
##
## [[1]]$`4`
## [1] 0 0 0 0 1 0 0 0 0 0
```

```

##
## [[1]]$`5`
## [1] 0 0 0 0 0 0 0 0 0 0
##
## [[1]]$`6`
## [1] 0 0 1 0 0 0 0 0 0 0
##
## [[1]]$`7`
## [1] 1 0 0 0 0 0 1 0 0 0
##
## [[1]]$`8`
## [1] 0 1 0 0 0 0 0 0 0 0
##
## [[1]]$`9`
## [1] 0 0 0 0 0 0 0 0 0 1
##
## [[1]]$`10`
## [1] 0 0 0 0 0 0 0 1 0 0
##
##
## [[2]]
## [[2]]$`1`
## [1] 0 0 0 0 1 0 0 0 1 0
##
## [[2]]$`2`
## [1] 0 0 0 0 0 0 1 0 0 0
##
## [[2]]$`3`
## [1] 0 0 0 1 0 0 0 0 0 1
##
## [[2]]$`4`
## [1] 0 1 0 0 0 0 0 0 0 0
##
## [[2]]$`5`
## [1] 0 0 0 0 0 0 0 0 0 0
##
## [[2]]$`6`
## [1] 0 0 0 0 0 0 0 0 0 0
##
## [[2]]$`7`
## [1] 1 0 0 0 0 0 0 0 0 0
##
## [[2]]$`8`
## [1] 0 0 1 0 0 0 0 0 0 0
##
## [[2]]$`9`
## [1] 0 0 0 0 0 0 0 0 0 0
##
## [[2]]$`10`
## [1] 0 0 0 0 0 1 0 1 0 0
##
##
## [[3]]
## [[3]]$`1`

```

```

## [1] 0 0 0 0 0 0 1 0 0 0
##
## [[3]]$`2`
## [1] 0 0 0 0 0 0 0 0 0 0
##
## [[3]]$`3`
## [1] 0 0 0 0 0 0 0 0 1 0
##
## [[3]]$`4`
## [1] 1 1 0 0 0 0 0 0 0 0
##
## [[3]]$`5`
## [1] 0 0 0 0 0 0 0 0 0 0
##
## [[3]]$`6`
## [1] 0 0 0 0 0 0 0 0 0 0
##
## [[3]]$`7`
## [1] 0 0 0 0 1 1 0 0 0 0
##
## [[3]]$`8`
## [1] 0 0 1 0 0 0 0 1 0 0
##
## [[3]]$`9`
## [1] 0 0 0 0 0 0 0 0 0 0
##
## [[3]]$`10`
## [1] 0 0 0 1 0 0 0 0 0 1
##
## [1] "Test Result: SUCCESS"
#Create matchMatrix
CmatchMatrix(payoffMatrix,2,2)

## [[1]]
## [[1]]$`1`
## [1] 0 0 0 0 0 1 0 0 1 0
##
## [[1]]$`2`
## [1] 1 0 0 1 0 0 0 0 0 0
##
## [[1]]$`3`
## [1] 0 0 1 0 0 1 0 0 0 0
##
## [[1]]$`4`
## [1] 0 0 0 1 1 0 0 0 0 0
##
## [[1]]$`5`
## [1] 0 1 0 0 0 0 1 0 0 0
##
## [[1]]$`6`
## [1] 1 0 0 0 0 0 0 1 0 0
##
## [[1]]$`7`
## [1] 0 0 0 0 1 0 1 0 0 0

```

```

##
## [[1]]$`8`
## [1] 0 1 0 0 0 0 0 0 0 1
##
## [[1]]$`9`
## [1] 0 0 1 0 0 0 0 0 0 1
##
## [[1]]$`10`
## [1] 0 0 0 0 0 0 0 1 1 0
##
##
## [[2]]
## [[2]]$`1`
## [1] 0 0 0 0 0 0 0 0 1 1
##
## [[2]]$`2`
## [1] 1 0 0 0 0 0 1 0 0 0
##
## [[2]]$`3`
## [1] 0 0 1 1 0 0 0 0 0 0
##
## [[2]]$`4`
## [1] 1 1 0 0 0 0 0 0 0 0
##
## [[2]]$`5`
## [1] 0 0 0 0 0 0 0 1 0 1
##
## [[2]]$`6`
## [1] 0 0 0 1 1 0 0 0 0 0
##
## [[2]]$`7`
## [1] 0 0 0 0 0 1 0 0 1 0
##
## [[2]]$`8`
## [1] 0 0 1 0 0 0 1 0 0 0
##
## [[2]]$`9`
## [1] 0 1 0 0 1 0 0 0 0 0
##
## [[2]]$`10`
## [1] 0 0 0 0 0 1 0 1 0 0
##
##
## [[3]]
## [[3]]$`1`
## [1] 0 0 0 0 0 0 1 1 0 0
##
## [[3]]$`2`
## [1] 0 0 1 0 0 0 1 0 0 0
##
## [[3]]$`3`
## [1] 0 0 0 0 0 0 0 0 1 1
##
## [[3]]$`4`

```

```
## [1] 1 1 0 0 0 0 0 0 0 0
##
## [[3]]$`5`
## [1] 0 0 0 0 1 0 0 0 1 0
##
## [[3]]$`6`
## [1] 0 0 0 0 1 1 0 0 0 0
##
## [[3]]$`7`
## [1] 0 0 1 0 0 1 0 0 0 0
##
## [[3]]$`8`
## [1] 0 0 0 1 0 0 0 1 0 0
##
## [[3]]$`9`
## [1] 1 1 0 0 0 0 0 0 0 0
##
## [[3]]$`10`
## [1] 0 0 0 1 0 0 0 0 0 1
##
## [1] "Test Result: SUCCESS"
```