Module6.R

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2023-02-18

A <- matrix(c(2,0,1,3), ncol = 2)  
B <- matrix(c(5,2,4,-1), ncol = 2)  
  
#1. Find A+B, find A-B  
A+B

## [,1] [,2]  
## [1,] 7 5  
## [2,] 2 2

A-B

## [,1] [,2]  
## [1,] -3 -3  
## [2,] -2 4

#2 Use the diag() function to build a matrix of size 4  
#with the following values in the diagonal 4,1,2,3  
C<- c(4,1,2,3)  
diag(C)

## [,1] [,2] [,3] [,4]  
## [1,] 4 0 0 0  
## [2,] 0 1 0 0  
## [3,] 0 0 2 0  
## [4,] 0 0 0 3

#3 Generate the matrix  
m<- diag(c(3,3,3,3,3))  
m<- diag(3,5,5)  
p<- matrix(c(0,1,1,1,1,2,0,0,0,0,2,0,0,0,0,2,0,0,0,0,2,0,0,0,0), ncol = 5, byrow = T)  
o<- m+p  
o

## [,1] [,2] [,3] [,4] [,5]  
## [1,] 3 1 1 1 1  
## [2,] 2 3 0 0 0  
## [3,] 2 0 3 0 0  
## [4,] 2 0 0 3 0  
## [5,] 2 0 0 0 3