BuiModule6.R

banka

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# 1. Adding and Subtracting Matrices in R   
  
A <- matrix(c(2,0,1,3), ncol=2)  
A

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

B <- matrix(c(5,2,4,-1), ncol=2)  
B

## [,1] [,2]  
## [1,] 5 4  
## [2,] 2 -1

AddedAB <- A + B  
AddedAB

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

SubtractedAB <- A - B  
SubtractedAB

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

# 2. Creating a diag() matrix with size 4 and diagonal 4,1,2,3  
C <- c(4,1,2,3)  
diag4123 <- diag(C, 4, 4)  
diag4123

## [,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. Creating a matrix() with size 5  
D1 <- c(3,1,1,1,1)  
E1 <- c(2,3,0,0,0)  
F1 <- c(2,0,3,0,0)  
G1 <- c(2,0,0,3,0)  
H1 <- c(2,0,0,0,3)  
  
matrix3 <- matrix(c(D1,E1,F1,G1,H1), nrow = 5, ncol = 5, byrow = TRUE)  
matrix3

## [,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