DS PRACTICALS

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## ROLL NO: - 4020

## CLASS: - SYCS

## Practical 2

#Python program to perform matrix operations, matrix addition,matrix subtraction,matrix multiplication - addition

mat1 = [[1, 2], [3, 4]]

mat2 = [[1, 2], [3, 4]]

mat3 = [[0, 0], [0, 0]]

for i in range(0, 2):

for j in range(0, 2):

mat3[i][j] = mat1[i][j] + mat2[i][j]

print("Addition of two matrices")

for i in range(0, 2):

for j in range(0, 2):

print(mat3[i][j], end = "")

print()

#Python program to perform matrix operations, matrix addition,matrix subtraction,matrix multiplication - subtraction

mat1 = [[9, 2], [5, 3]]

mat2 = [[8, 1], [4, 2]]

mat3 = [[0, 0], [0, 0]]

for i in range(0, 2):

for j in range(0, 2):

mat3[i][j] = mat1[i][j] - mat2[i][j]

print("Subtraction of two matrices")

for i in range(0, 2):

for j in range(0, 2):

print(mat3[i][j], end = "")

print()

#Python program to multiply two matrices

mat1 = [[9, 2], [5, 3]]

mat2 = [[8, 1], [4, 2]]

mat3 = [[0, 0], [0, 0]]

for i in range(0, 2):

for j in range(0, 2):

mat3[i][j] = mat1[i][j] \* mat2[i][j]

print("Multiplication of two matrices")

for i in range(0, 2):

for j in range(0, 2):

print(mat3[i][j], end = "")

print()