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#Enrollment No: 202203103510097
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#Branch: B.Tech Computer Science and Engineering
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```
rows = int(input("--> Enter the number of rows for the matrix: "))
```

```
columns = int(input("--> Enter the number of columns for the matrix: "))
```

```
print()
```

```
matrix_1 = []
```

```
matrix_2 = []
```

```
result = []
```

```
print("--->>> Enter the values for the First Matrix")
```

```
for i in range(rows):
```

```
    a = []
```

```
    for j in range(columns):
```

```
        a.append(int(input("--> Enter the elements for the {0} row of first  
matrix: ".format(i+1))))
```

```
    print()
```

```
    matrix_1.append(a)
```

```
print()
```

```
print("--->>> Enter the values for the Second Matrix")
```

```
for i in range(rows):
```

```
    b = []
```

```
    for j in range(columns):
```

```
        b.append(int(input("--> Enter the elements for the {0} row of second  
matrix: ".format(i+1))))
```

```
    print()
```

```
    matrix_2.append(b)
```

```
print()
```

```
print("--> FIRST MATRIX")
```

```
for i in range(rows):
```

```
    for j in range(columns):
```

```
        print(matrix_1[i][j], end = " ")
```

```
    print()
```

```
print("--> SECOND MATRIX")
```

```
for i in range(rows):
```

```
    for j in range(columns):
```

```
        print(matrix_2[i][j], end = " ")
```

```
    print()
```

```
print()
```

```
print("1 -> ADDITION\n2 -> SUBTRATCTION\n3 -> MULTIPLICATION\n")
```

```
operation = int(input("--> Enter the choice of operation you would like to  
perform on the matrix: "))
```

```
for i in range(rows):
```

```
    c = []
```

```
    for j in range(columns):
```

```
        c.append(0)
```

```
    result.append(c)
```

```
print()
```

```
if operation == 1 :
```

```
    for i in range(rows) :
```

```
        for j in range(columns) :
```

```
            result[i][j] = matrix_1[i][j] + matrix_2[i][j]
```

```
print("--> ADDITION OF THE MATRIX")
```

```
for i in range(rows) :
```

```
    for j in range(columns) :
```

```
        print(result[i][j],end=" ")
```

```
    print()
```

```
58
59 elif operation == 2 :
60     for i in range(rows) :
61         for j in range(columns) :
62             result[i][j] = matrix_1[i][j] - matrix_2[i][j]
63     print("--> SUBTRACTION OF THE MATRIX")
64     for i in range(rows) :
65         for j in range(columns) :
66             print(result[i][j],end=" ")
67     print()
68
69 elif operation == 3 :
70     for i in range(rows) :
71         for j in range(columns) :
72             result[i][j] += matrix_1[i][j] * matrix_2[i][j]
73     print("--> MULTIPLICATION OF THE MATRIX")
74     for i in range(rows) :
75         for j in range(columns) :
76             print(result[i][j],end=" ")
77     print()
78 print()
79
80 print("-*-*-*-*-*END OF PRACTICAL 15-*-*-*-*-*")
```