

Operations on Matrices

1. **Operations on Matrices:** Create a class called Matrix to calculate the addition, subtraction, transpose and determinant. Raise an exception if you are not able to find the addition and subtraction of the matrices.

Input Format:

- The first line of the input contains the order of the matrix separated by a space (m n)
- From the second line onwards there m rows and n columns which are the elements of the first matrix that are separated by spaces.
- The next line of the input contains the order of the matrix separated by a space (p q)
- From the next line onwards there are p rows and q columns which are the elements of the second matrix that are separated by spaces.
- The next line contains the t value which indicates the number of operations on matrices.
- From the next line onwards there are t lines which has operations.

Output Format:

- Depends on the operation print the output in the format as shown in the sample test case.

Sample Input #1:

```
3 3
1 2 3
4 5 6
7 8 9
3 3
1 0 0
0 1 0
0 0 1
5
Add A, B
Subtract B, A
Transpose A
Det B
Transpose B
```

Sample Output #1:

```
Addition
2 2 3
4 6 6
7 8 10
Subtraction
0 2 3
4 4 6
7 8 8
Transpose
1 4 7
2 5 8
3 6 9
Determinant
1
Transpose
1 0 0
0 1 0
```

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