

Multiplication of two Matrices

Problem	Submissions	Leaderboard	Discussions
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Two friends Ankit and Deepanshu are having two matrices of size $m_1 \times n_1$ and $m_2 \times n_2$ respectively. Both of them are good at mathematics and they wondering how we can multiply the matrices. Your task is to help both of them in multiplication of matrices.

Print the final matrix after the multiplication.
Print '*' if the multiplication is not possible.

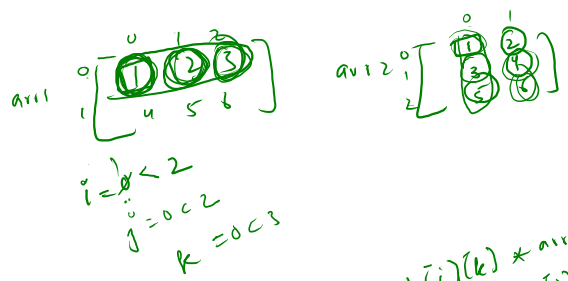
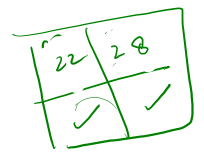
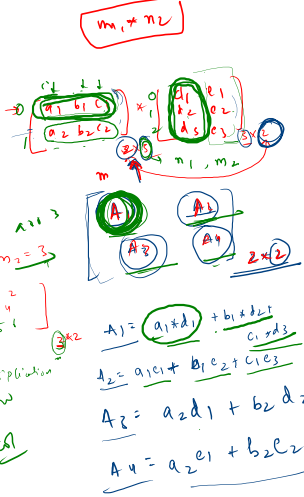
Note: Multiplication of two matrices is only possible when $n_1 = m_2$

```
Sample Input 0
3 3
1 2 3
2 3 4
3 4 5
3 3
1 2 3
4 5 6
```

```
for (int i=0; i<m1; i++)
{
    for (int j=0; j<n2; j++)
    {
        int sum=0;
        for (int k=0; k<n1; k++)
        {
            A[i][j] += arr1[i][k] * arr2[k][j];
        }
    }
}
```

$2 \times 3 + 18 = 22$

$1 + 6 + 15 = 22$



$2 \times 3 = 6$
 $3 \times 5 = 15$

$1 \times 2 = 2$
 $2 \times 4 = 8$
 $3 \times 6 = 18$

$arr3[i][j] = arr1[i][k] * arr2[k][j]$
 $= arr1[0][0] * arr2[0][0] = 1 * 1 = 1$
 $= arr1[0][1] * arr2[1][0] = 2 * 3 = 6$
 $= arr1[0][2] * arr2[2][0] = 3 * 5 = 15$
 $= arr1[0][0] * arr2[0][1] = 1 * 2 = 2$
 $= arr1[0][1] * arr2[1][1] = 2 * 4 = 8$
 $= arr1[0][2] * arr2[2][1] = 3 * 6 = 18$

Given a $m \times n$ matrix and you are also given an integer x . Each row and column of the matrix is sorted in increasing order. You are required to find x in the matrix and print its location int (row, col) format as discussed in output format below. In case an element is not found, print "Not Found".

Sample Input 0

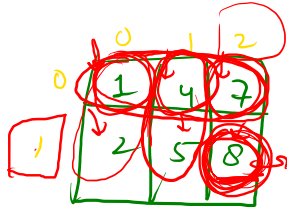
```
2
3
1 4 7
2 5 8
8
```

Sample Output 0

```
1
2
```

$m = 2$
 $n = 3$

$x = 8$
↑



row \rightarrow 1
col \rightarrow 2

if Not Found

1 \rightarrow row
2 \rightarrow col

present \rightarrow row, col
 \hookrightarrow print "Not Found"

Is Equal?

Problem

Submissions

Leaderboard

Discussions

Take two strings as input. Check if both these strings are exactly equal or not.

Sample Input 0

```
GEEKSTER
GEEKSTER
```

Sample Output 0

```
true
```

Handwritten notes for Sample Input 0:

```
str1 = "GEEKSTER"
str2 = "GEEKSTER"
```

Arrows indicate character-by-character comparison between the two strings.

Handwritten notes:

↳ character by character
↳ same
→ length

Handwritten notes for a different input:

```
  i   i
  ↓   ↓
GEEK
GSSK
```

An arrow points from the 'E' in the first string to the 'S' in the second string, with the text "return false" written next to it.

Handwritten notes for another example:

```
str1 = HE
str2 = SHE
```

A circled 'f' is written below, indicating the result is false.