Multidimensional Arrays

- **Multiply the matrices**
- **Two matrices A[][] and B[][] can only be multiplied if number of columns in A is equal to number of rows in B.**
- **Column in A == Row in B**

int x [3] [3]

1	2	3
4	5	6
7	8	9

int x [3] [2]

1	2
4	5
7	8

Hello world

Multidimensional Arrays

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int x [3] [3]

1	2	3
4	5	6
7	8	9

int x [2] [3]

1	2	3
4	5	6

Hello world

Multidimensional Arrays

- int x [3] [2]

4	8
0	2
1	6

×

- int x [2] [3]

5	2
9	4

- Column in A == Row in B
- Let's suppose, A = n1 * m1 B = n2 * m2

m1 == n2

Result matrix = n1 * m2

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Multidimensional Arrays

int x [3] [2]

4	8
0	2
1	6

×

int x [2] [4]

4	8	4	8
0	2	0	2

Column in A == Row in B

Resultant Matrix [3] [4]

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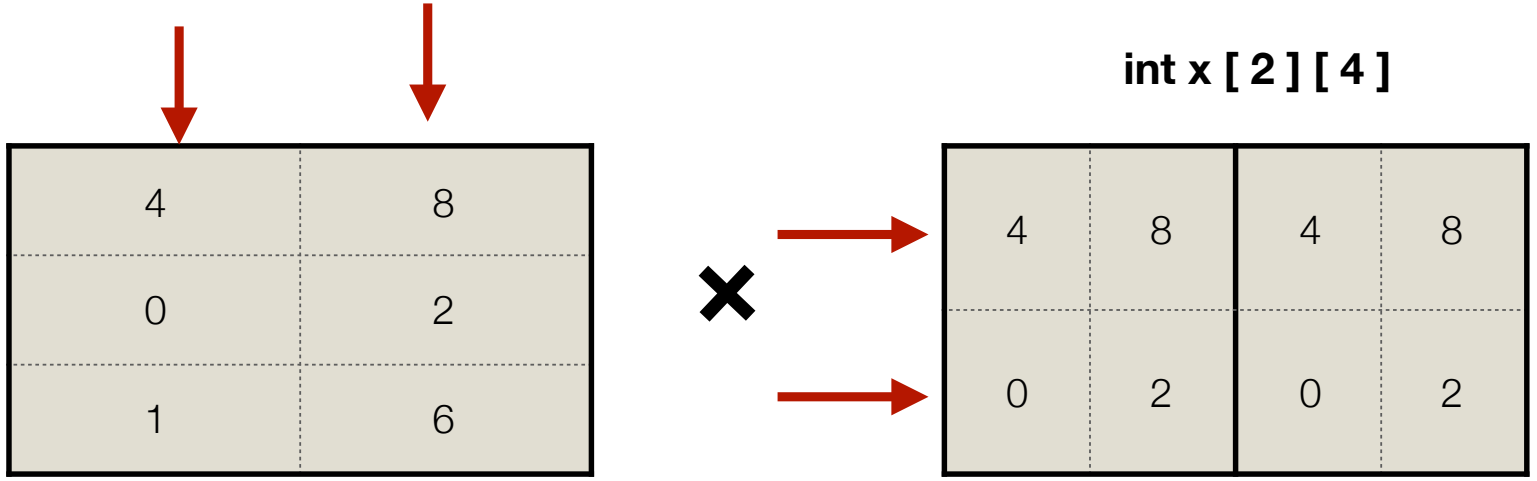
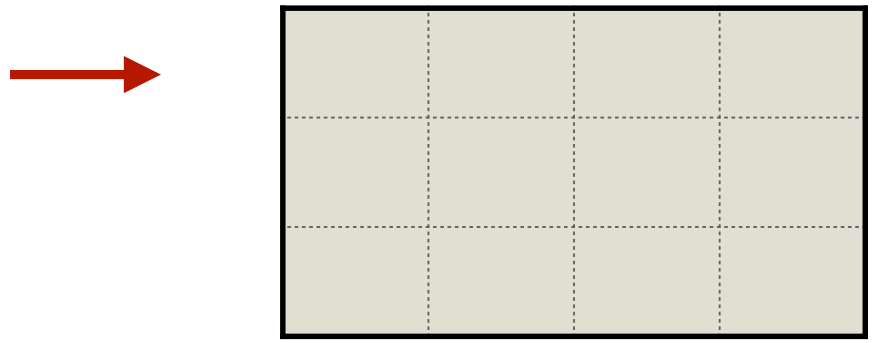
Multidimensional Arrays



- **Column in A == Row in B**

Resultant Matrix [3] [4]



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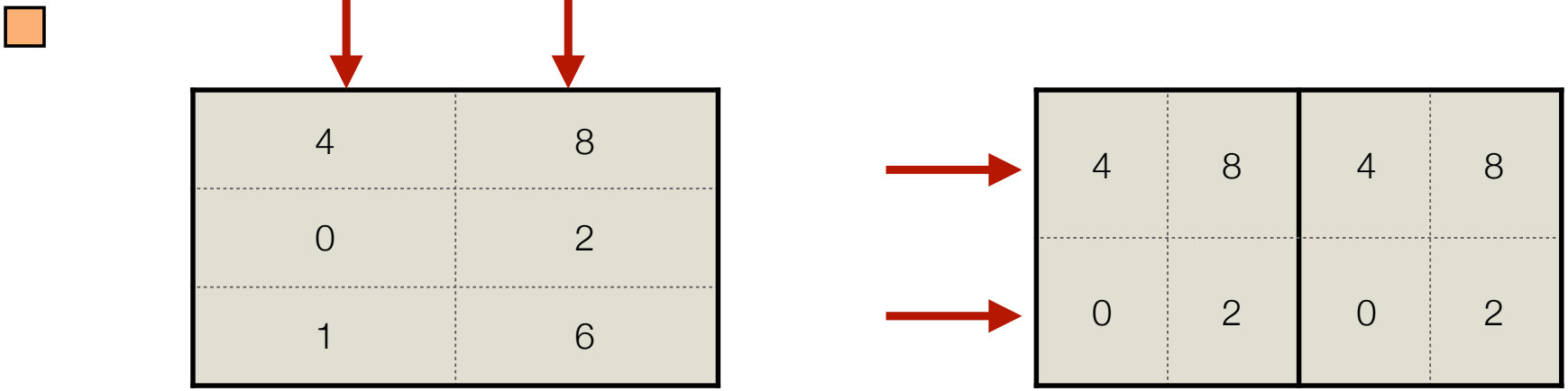
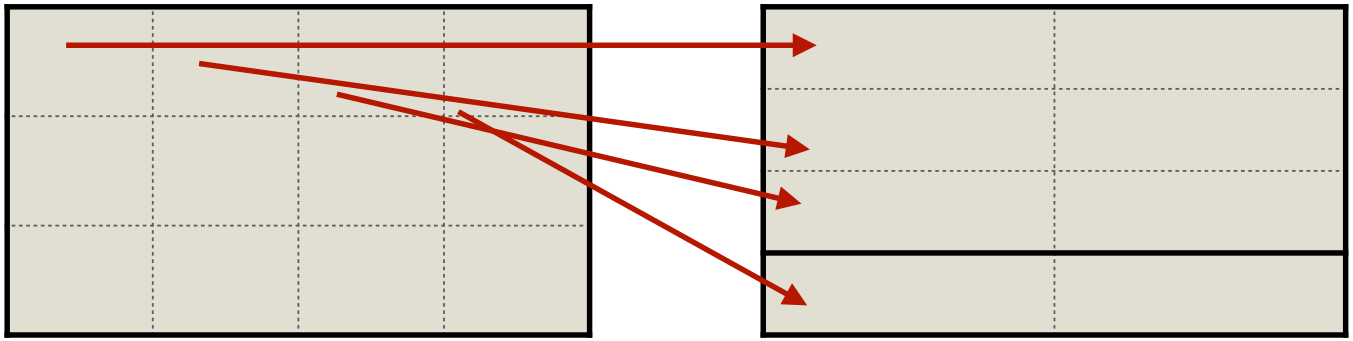
Multidimensional Arrays





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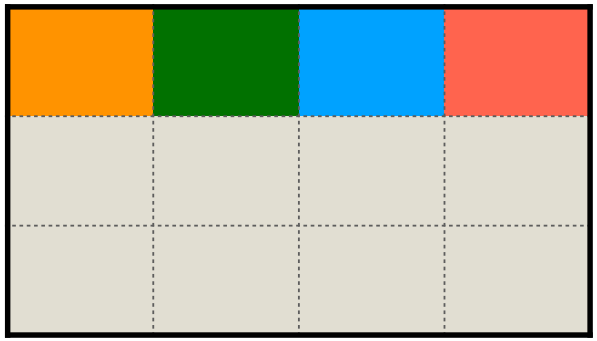
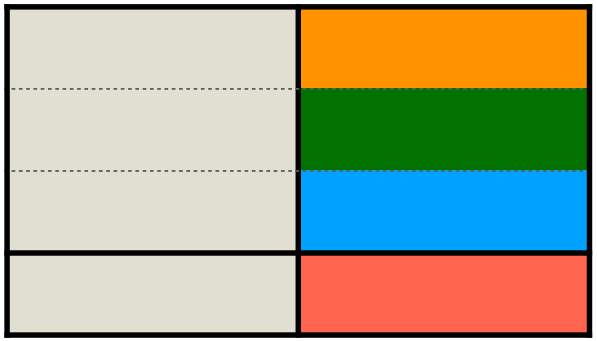
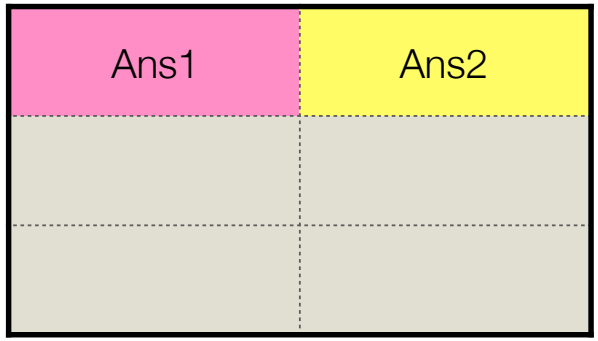
Multidimensional Arrays







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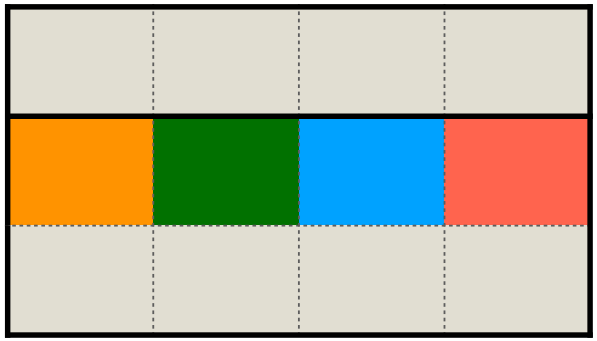
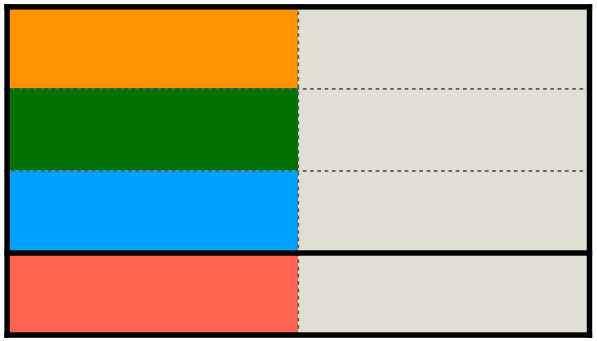
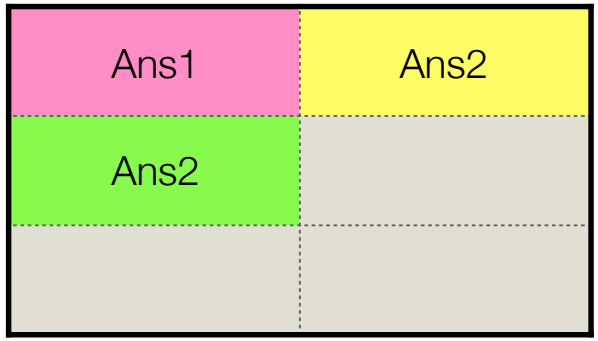
Multidimensional Arrays







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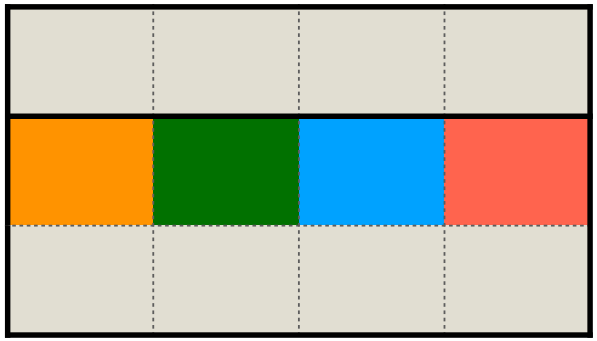
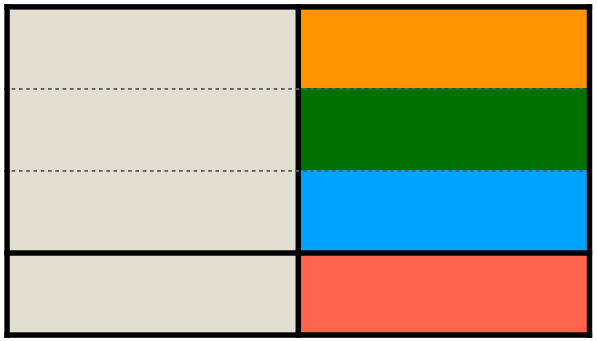
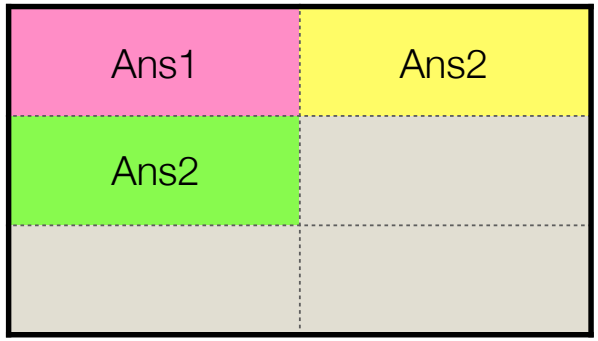
Multidimensional Arrays







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