

$$\text{indrow} = 0, \text{indcol} = 0, \text{indaux} = 0$$

$$c[0][0] = c[0][0] + a[0][0] \times b[0][0]$$

$$c[0][0] = 0 + (1) \times (1) = 1$$

$$\text{indaux} = 1$$

$$\begin{aligned} c[0][0] &= c[0][0] + a[0][1] \times b[1][0] \\ &= 1 + 0 \times 4 = 1 \end{aligned}$$

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$$\text{indaux} = 2$$

$$\begin{aligned} c[0][0] &= c[0][0] + a[0][2] \times b[2][0] \\ &= 1 + 0 \times 7 = 1 \end{aligned}$$

$$\text{indrow} = 0, \text{indcol} = 1, \text{indaux} = 0$$

$$\begin{aligned} c[0][1] &= c[0][1] + a[0][0] \times b[0][1] \\ &= 0 + 1 \times 2 = 2 \end{aligned}$$

$$\begin{aligned} c[0][1] &= c[0][1] + a[0][1] \times b[1][1] \\ &= 2 + 0 \times 5 = 2 \end{aligned}$$

$$\text{indaux} = 2$$

$$\begin{aligned} c[0][1] &= c[0][1] + a[0][2] \times b[2][1] \\ &= 2 + 0 \times 8 = 2 \end{aligned}$$

$$\text{indrow} = 0, \text{indcol} = 2, \text{indaux} = 0$$

$$c[0][2] = c[0][2] + a[0][0] \times b[0][2]$$

$$= 0 + 1 \times 3 = 3$$

$$\text{indaux} = 1$$

$$c[0][2] = c[0][2] + a[0][1] \times b[1][2]$$

$$= 3 + 0 \times 6 = 3$$

$$\text{indaux} = 2$$

$$c[0][2] = c[0][2] + a[0][2] \times b[2][2]$$

$$= 3 + 0 \times 9 = 3$$

$$\text{indrow} = 1, \text{indcol} = 0, \text{indaux} = 0$$

$$c[1][0] = c[1][0] + a[1][0] \times b[0][0]$$

$$= 0 + 0 \times 1 = 0$$

$$\text{indaux} = 1$$

$$c[1][0] = c[1][0] + a[1][1] \times b[1][0]$$

$$= 0 + 1 \times 4 = 4$$

$$\text{indaux} = 2$$

$$c[1][0] = c[1][0] + a[1][2] \times b[2][0]$$

$$= 4 + 0 \times 7 = 4$$

$$\text{indrow} = 1, \text{indcol} = 1, \text{indaux} = 0$$

$$c[1][1] = c[1][1] + a[1][0] \times b[0][1]$$

$$= 0 + 0 \times 2 = 0$$

$$= 0 + 0 \times 2 = 0$$

$$\text{indrow} = 1, \text{indcol} = 1, \text{indaux} = 1$$

$$c[1][1] = c[1][1] + a[1][1] \times b[1][1]$$

$$= 0 + 1 \times 5 = 5$$

indrow = 1, indcol = 1, indaux = 2

$$c[1][1] = c[1][1] + a[1][1] \times b[1][1] \\ = 5 + 0 \times 5 = 5$$

indrow = 1, indcol = 2, indaux = 0

$$c[1][2] = c[1][2] + a[1][2] \times b[0][2] \\ = 0 + 0 \times 3 = 0$$

indaux = 1

$$c[1][2] = c[1][2] + a[1][1] \times b[1][2] \\ = 0 + 1 \times 6 = 6$$

indaux = 2

$$c[1][2] = c[1][2] + a[1][2] \times b[2][2] \\ = 6 + 0 \times 9 = 6$$

indrow = 2, indcol = 0, indaux = 0

$$c[2][0] = c[2][0] + a[2][0] \times b[0][0] \\ = 0 + 0 \times 1 = 0$$

indaux = 1

$$c[2][0] = c[2][0] + a[2][1] \times b[1][0] \\ = 0 + 0 \times 4 = 0$$

indaux = 2

$$c[2][0] = c[2][0] + a[2][2] \times b[2][0] \\ = 0 + 1 \times 7 = 7$$

indrow = 2, indcol = 1, indaux = 0

$$c[2][1] = c[2][1] + a[2][0] \times b[0][1] \\ = 0 + 0 \times 5 = 0$$

index = 1

$$c[2][1] = c[2][1] + a[2][1] \times b[1][1] \\ = 0 + 0 \times 5 = 0$$

index = 2

$$c[2][1] = c[2][1] + a[2][2] \times b[2][1] \\ = 0 + 1 \times 8 = 8$$

index = 2 index = 2 index = 0

$$c[2][2] = c[2][2] + a[2][0] \times b[0][2] \\ = 0 + 0 \times 3 = 0$$

index = 1

$$c[2][2] = c[2][2] + a[2][1] \times b[1][2] \\ = 0 + 0 \times 6 = 0$$

$$c[2][2] = c[2][2] + a[2][2] \times b[2][2] \\ = 0 + 1 \times 9 = 9$$

~~$$c = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$$~~

$$c = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$$

$$c[\text{indrow}][\text{indcol}] = c[\text{indrow}][\text{indcol}] +$$

$$a[\text{indrow}][\text{indaux}] \times$$

$$b[\text{indaux}]$$

$$[\text{indcol}]$$

indrow	indcol	indaux

=

~~c[0][0]~~

$$a = \begin{bmatrix} [1, 0, 0] \\ [0, 1, 0] \\ [0, 0, 1] \end{bmatrix}$$

$$b = \begin{bmatrix} [1, 2, 3] \\ [4, 5, 6] \\ [7, 8, 9] \end{bmatrix}$$

$$c[0][0] = c[0][0] + a[0][0] \times b[0][0]$$

$$= 0 + (1) \times (1)$$

$$= 1$$

$$c[0][0] = c[0][0] + a[0][1] \times b[1][0]$$

$$= 1 + 0 \times 2$$

$$= 1 + 0 = 1$$

$$c[0][0] = c[0][0] + a[0][2] \times b[2][0]$$

$$= 1 + 0 \times 3 = 1$$

$a = \{[1, 0, 0], [0, 1, 0], [0, 0, 1]\}$
 $b = \{[1, 2, 3], [4, 5, 6], [7, 8, 9]\}$

index	index
0	0
1	1
	2

$$c[0][1] = c[0][1] + a[0][0] \times b[0][1]$$

$$c[0][1] = 0 + 1 \times 2$$

$$c[0][1] = 0 + 2$$

$$c[0][1] = 2$$

$$c[0][1] = c[0][1] + a[0][1] \times b[1][2]$$

$$= 2 + 0$$