

$$\text{matrix 1} = \bar{i} \begin{bmatrix} \xrightarrow{k} \\ 1_{0,0} & 2_{0,1} & 3_{0,2} \\ \downarrow \\ 4_{1,0} & 5_{1,1} & 6_{1,2} \end{bmatrix}$$

$$\text{matrix 2} = k \begin{bmatrix} \xrightarrow{j} \\ 1_{0,0} & 4_{0,1} \\ \downarrow \\ 2_{1,0} & 5_{1,1} \\ \downarrow \\ 3_{2,0} & 6_{2,1} \end{bmatrix}$$

$$\text{result} = \begin{bmatrix} 14 & 32 \\ 32 & 77 \end{bmatrix}$$

연산

$$\bar{i} = 0$$

$$\bar{j} = 0$$

$$k=0 \rightarrow A_{0,0} \times B_{0,0} = 1 \times 1 = 1, \quad \text{sum} = 0 + 1 = 1$$

$$k=1 \rightarrow A_{0,1} \times B_{1,0} = 2 \times 2 = 4, \quad \text{sum} = 1 + 4 = 5$$

$$k=2 \rightarrow A_{0,2} \times B_{2,0} = 3 \times 3 = 9, \quad \text{sum} = 5 + 9 = 14$$

$C_{0,0}$

$$\bar{j} = 1$$

$$k=0 \rightarrow A_{0,0} \times B_{0,1} = 1 \times 4 = 4, \quad \text{sum} = 0 + 4 = 4$$

$$k=1 \rightarrow A_{0,1} \times B_{1,1} = 2 \times 5 = 10, \quad \text{sum} = 4 + 10 = 14$$

$$k=2 \rightarrow A_{0,2} \times B_{2,1} = 3 \times 6 = 18, \quad \text{sum} = 14 + 18 = 32$$

$C_{0,1}$

$$\bar{i} = 1$$

$$\bar{j} = 0$$

$$k=0 \rightarrow A_{1,0} \times B_{0,0} = 4 \times 1 = 4, \quad \text{sum} = 0 + 4 = 4$$

$$k=1 \rightarrow A_{1,1} \times B_{1,0} = 5 \times 2 = 10, \quad \text{sum} = 4 + 10 = 14$$

$$k=2 \rightarrow A_{1,2} \times B_{2,0} = 6 \times 3 = 18, \quad \text{sum} = 14 + 18 = 32$$

$C_{1,0}$

$$\bar{j} = 1$$

$$k=0 \rightarrow A_{1,0} \times B_{0,1} = 4 \times 4 = 16, \quad \text{sum} = 0 + 16 = 16$$

$$k=1 \rightarrow A_{1,1} \times B_{1,1} = 5 \times 5 = 25, \quad \text{sum} = 16 + 25 = 41$$

$$k=2 \rightarrow A_{1,2} \times B_{2,1} = 6 \times 6 = 36, \quad \text{sum} = 41 + 36 = 77$$

$C_{1,1}$