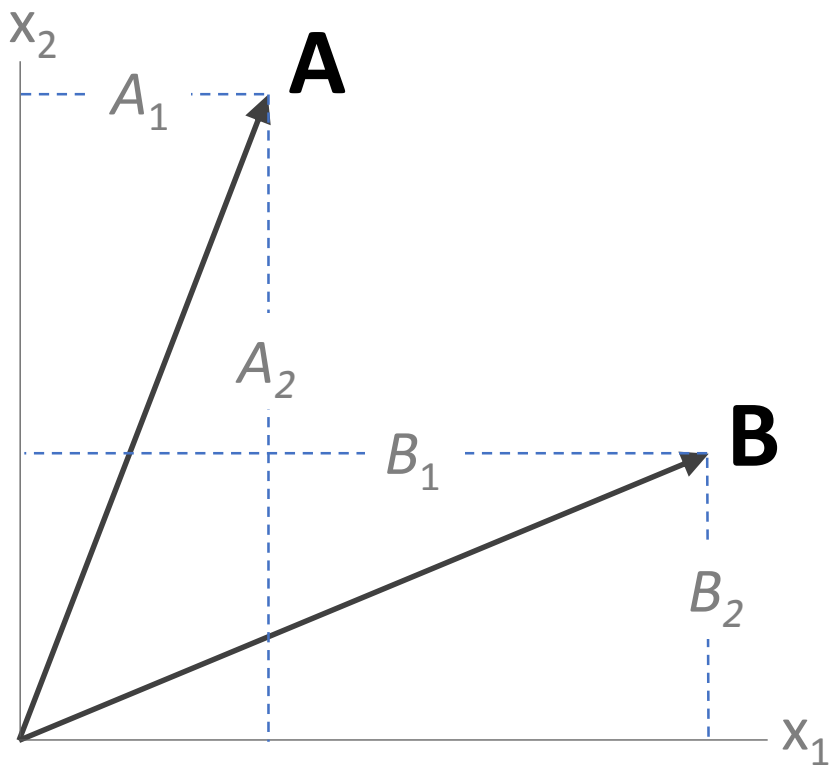


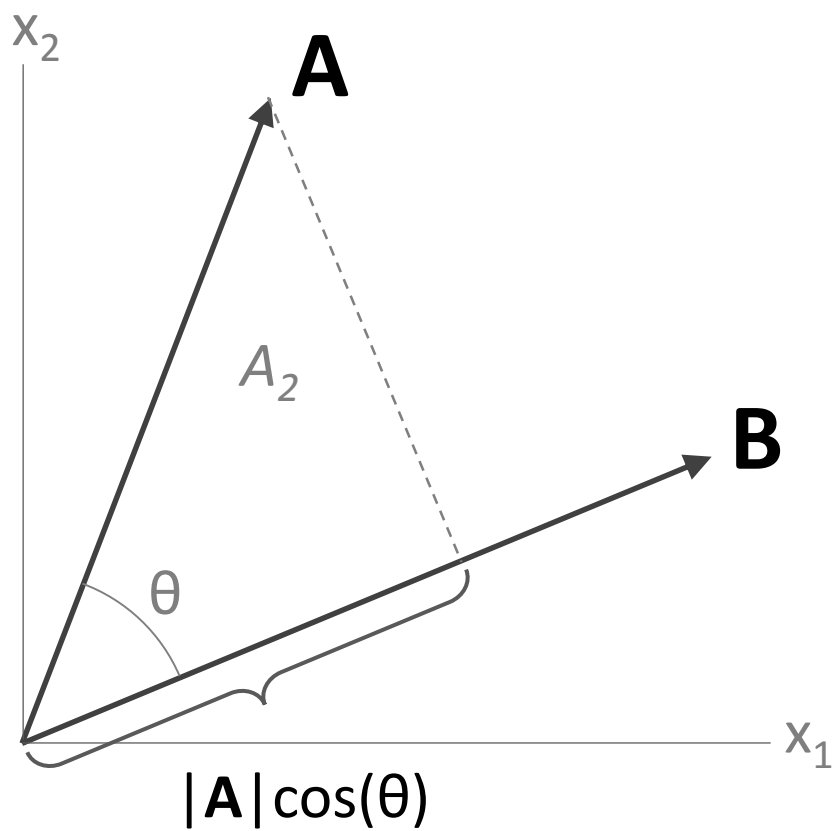
$$\mathbf{A} = \begin{bmatrix} A_1 \\ A_2 \end{bmatrix} \quad \mathbf{B} = \begin{bmatrix} B_1 \\ B_2 \end{bmatrix}$$



$$\mathbf{A} = \begin{bmatrix} A_1 \\ A_2 \end{bmatrix} \quad \mathbf{B} = \begin{bmatrix} B_1 \\ B_2 \end{bmatrix}$$

$$\mathbf{A} \cdot \mathbf{B} = [A_1 \ A_2] \begin{bmatrix} B_1 \\ B_2 \end{bmatrix}$$

$$= A_1 B_1 + A_2 B_2$$



$$\mathbf{A} = \begin{bmatrix} A_1 \\ A_2 \end{bmatrix} \quad \mathbf{B} = \begin{bmatrix} B_1 \\ B_2 \end{bmatrix}$$

$$\mathbf{A} \cdot \mathbf{B} = [A_1 \ A_2] \begin{bmatrix} B_1 \\ B_2 \end{bmatrix}$$

$$= A_1 B_1 + A_2 B_2$$

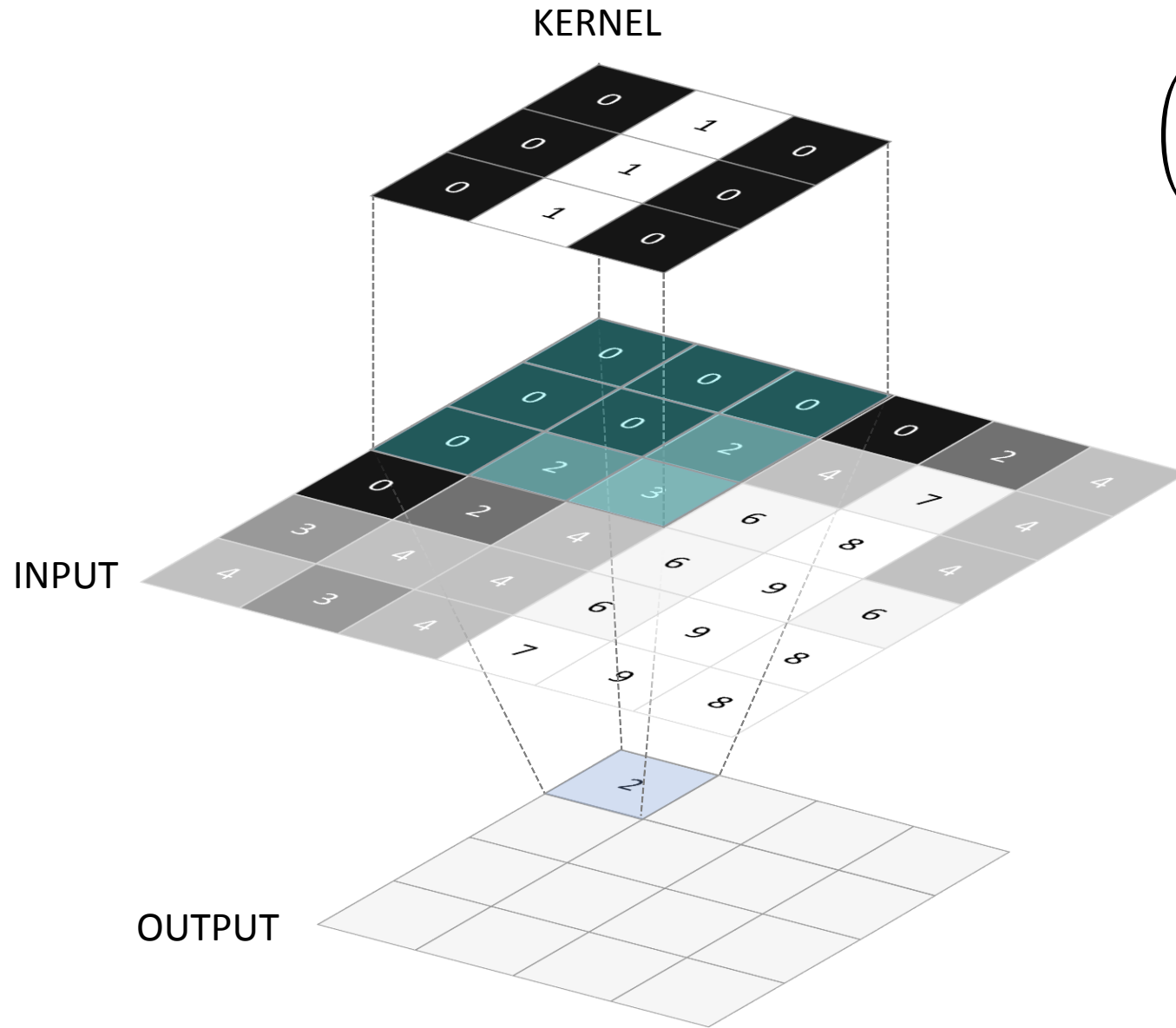
KERNEL

0	1	0
0	1	0
0	1	0

INPUT

0	0	0	0	0
0	0	0	2	4
0	2	3	2	4
3	2	4	6	7
4	3	4	6	8
		7	9	4
		9	8	6
		8		

OUTPUT



$$\begin{pmatrix} 0 & 1 & 0 \\ 0 & 1 & 0 \\ 0 & 1 & 0 \end{pmatrix} \begin{pmatrix} 0 & 0 & 0 \\ 0 & 0 & 2 \\ 0 & 2 & 3 \end{pmatrix} =$$

$$\begin{aligned} & 0 * 0 + 1 * 0 + 0 * 0 \\ & + 0 * 0 + 1 * 0 + 0 * 2 \\ & + 0 * 0 + 1 * 2 + 0 * 3 \end{aligned}$$

$$= 2$$

KERNEL

0	1	0
0	1	0
0	1	0

INPUT

The image shows a 3D perspective of a 6x6 grid. The grid contains numbers from 0 to 9. A 3x3 subgrid is highlighted with a red border and a light blue background. The numbers in this subgrid are 0, 0, 0 in the top row; 0, 2, 4 in the middle row; and 2, 3, 6 in the bottom row. The rest of the grid is shaded in various tones of gray and black. Dashed lines indicate the projection of the 3x3 subgrid onto the 6x6 grid.

0	0	0	0	2	4
0	0	0	2	3	6
0	2	3	6	9	8
3	4	4	6	9	8
4	3	4	7	9	

OUTPUT

		2	5	

KERNEL

0	1	0
0	1	0
0	1	0

INPUT

0	0	0	0	4
0	0	0	2	4
0	2	3	6	4
3	4	4	6	4
4	3	4	7	4
			8	
			9	
			9	
			8	
			6	

OUTPUT

		2		
			5	
				10

KERNEL

0	1	0
0	1	0
0	1	0

INPUT

0	0	0	0	0
0	0	0	2	2
0	2	2	3	4
3	4	4	6	9
4	3	4	6	9
		7	9	8
			8	

OUTPUT

		2	5	10	17

KERNEL

0	1	0
0	1	0
0	1	0

INPUT

0	0	0	0	2	4
0	0	2	3	2	4
0	2	2	4	6	7
3	4	4	6	9	8
4	3	4	6	9	6
		1	9	8	

OUTPUT

	2	5	10	17
	4			

KERNEL

0	1	0
0	1	0
0	1	0

INPUT

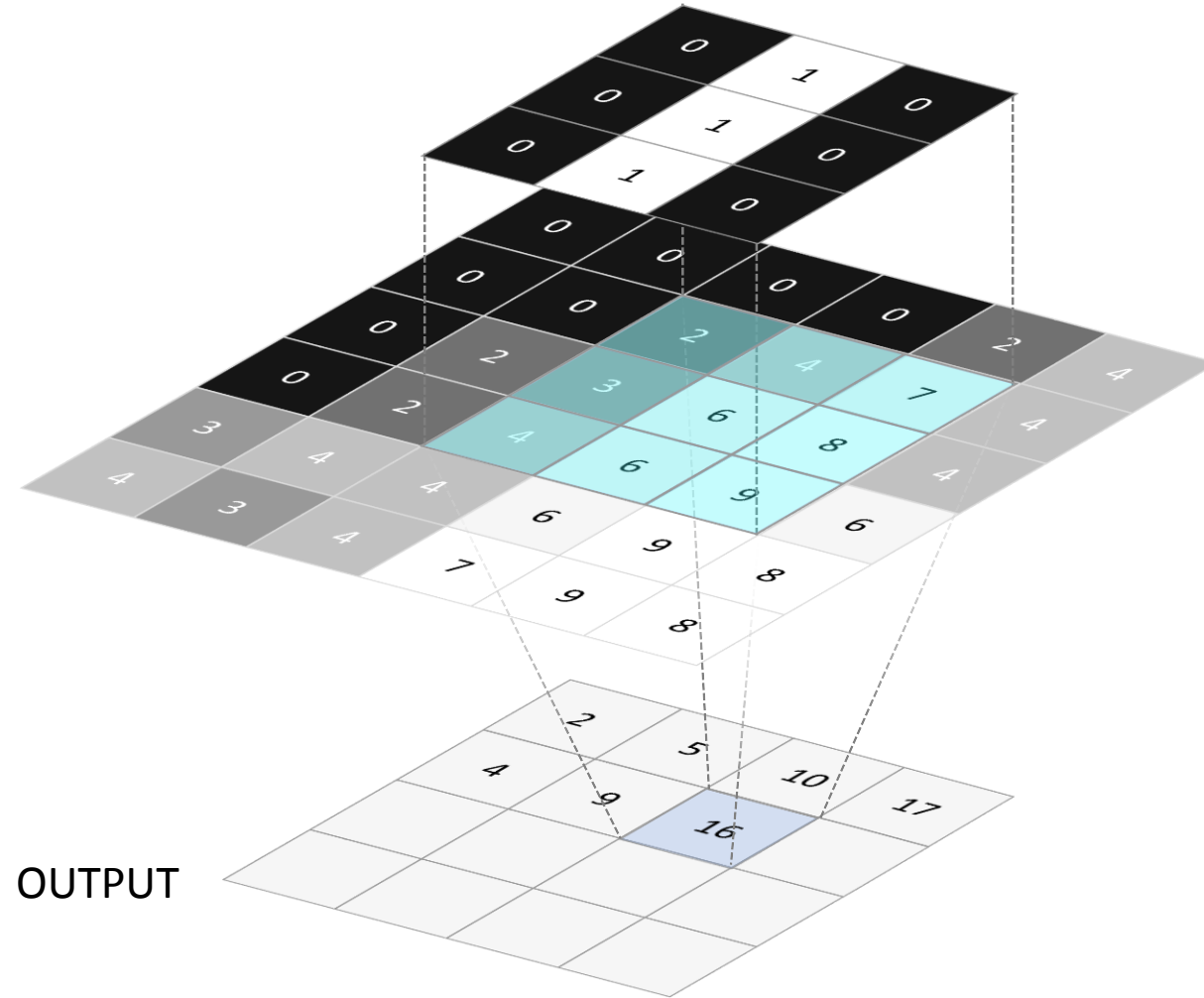
0	0	0	0	2	4
0	0	0	2	4	7
2	2	3	6	8	4
4	4	6	9	6	
3	4	7	9	8	
4	3	4	6	8	

OUTPUT

		2	5	10	17
	4	9			

KERNEL

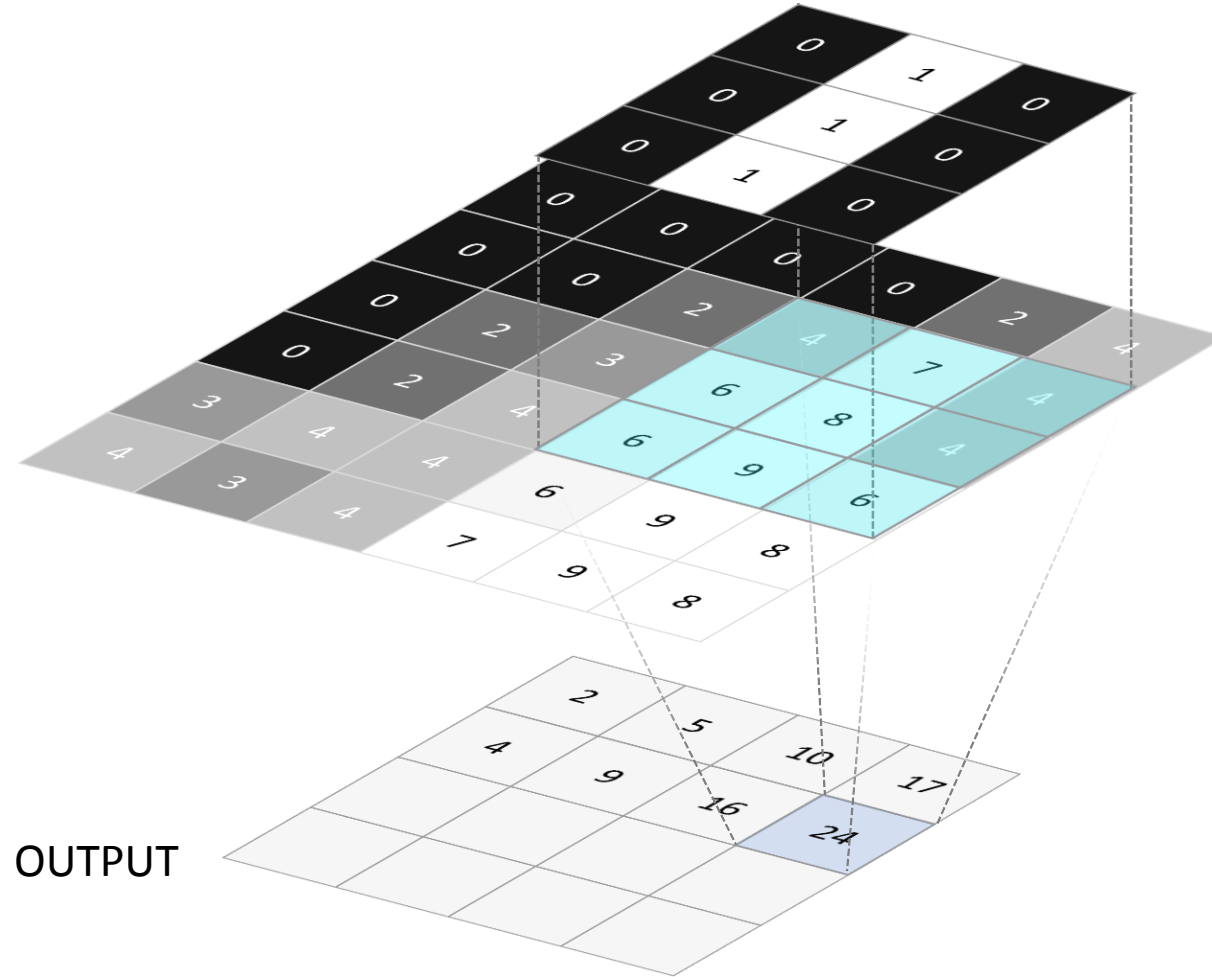
INPUT



OUTPUT

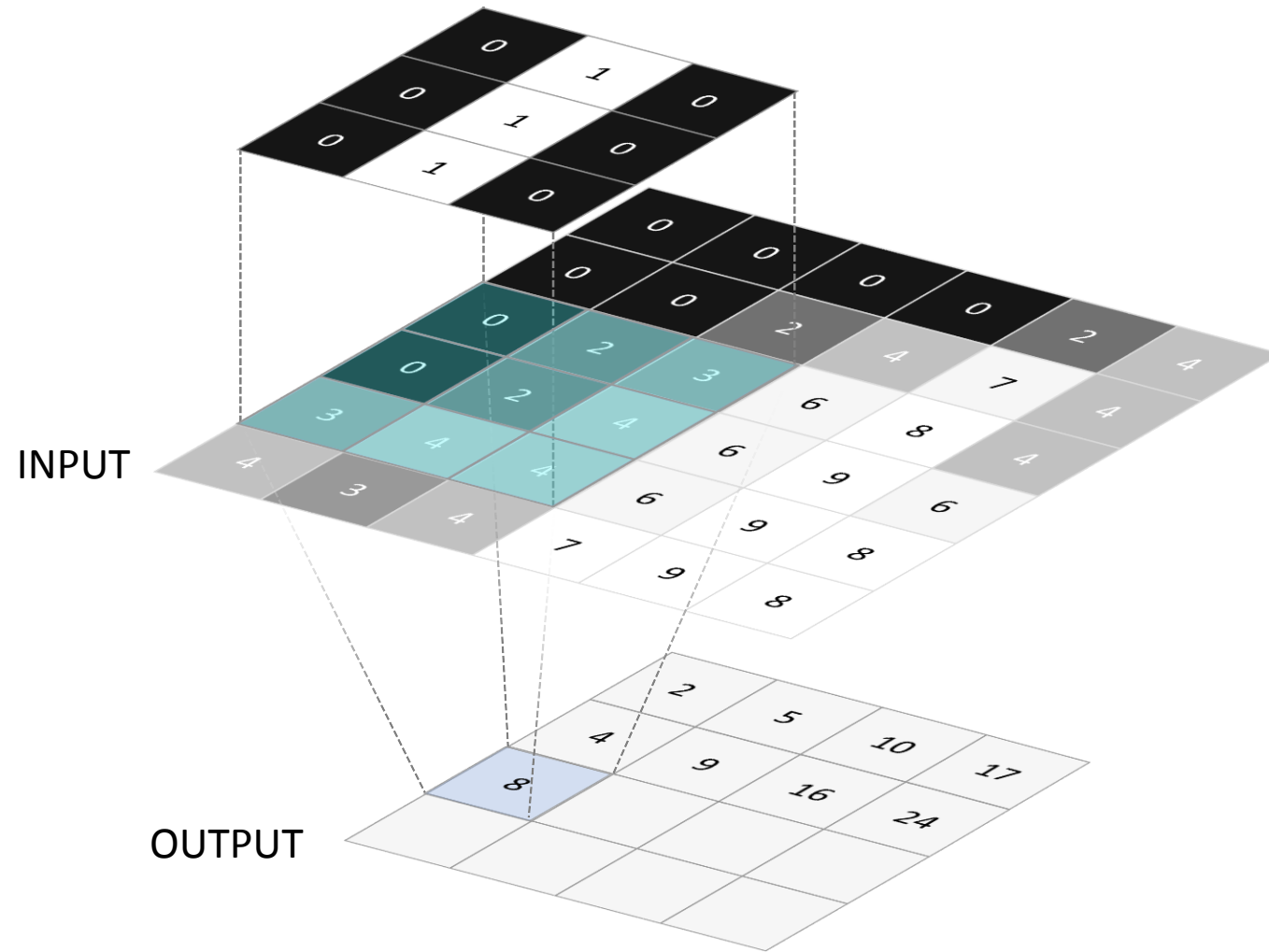
KERNEL

INPUT



OUTPUT

KERNEL



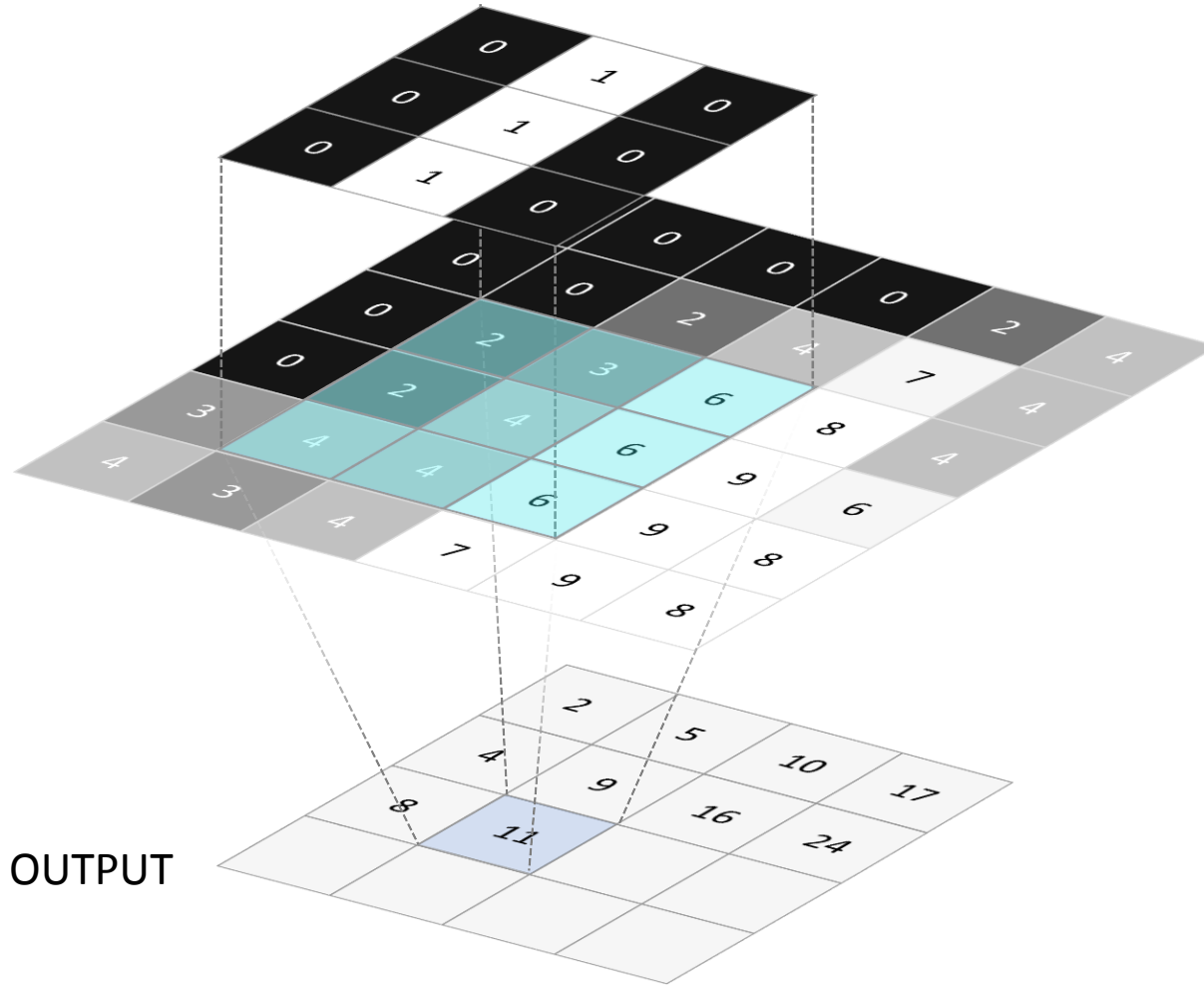
INPUT

OUTPUT

KERNEL

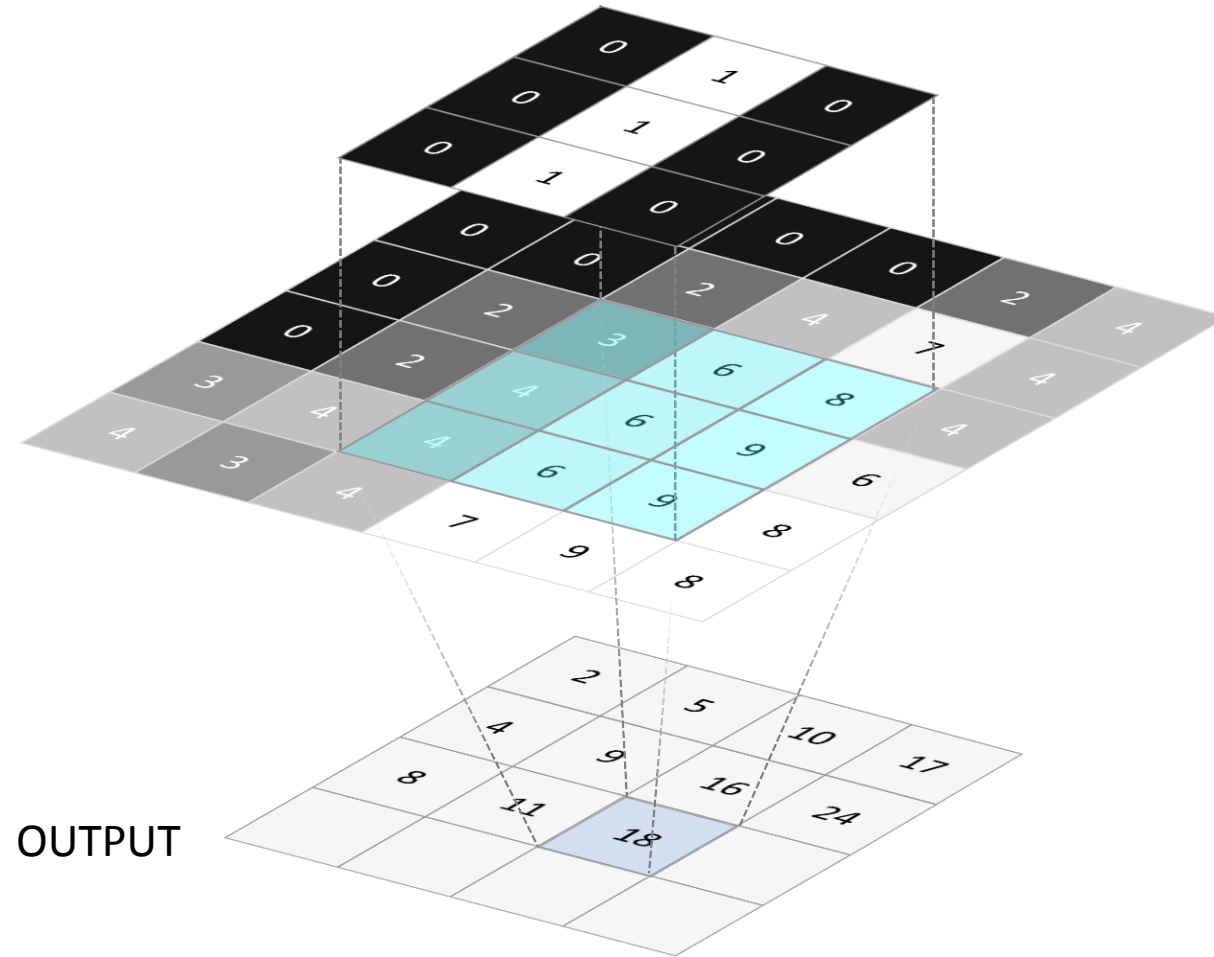
INPUT

OUTPUT



KERNEL

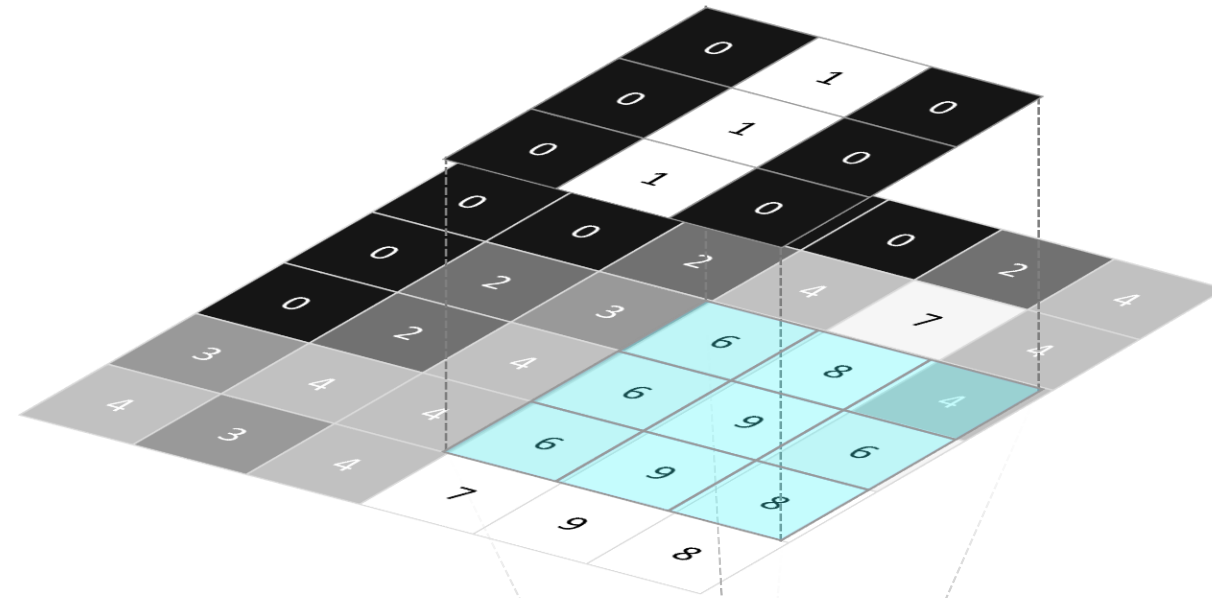
INPUT



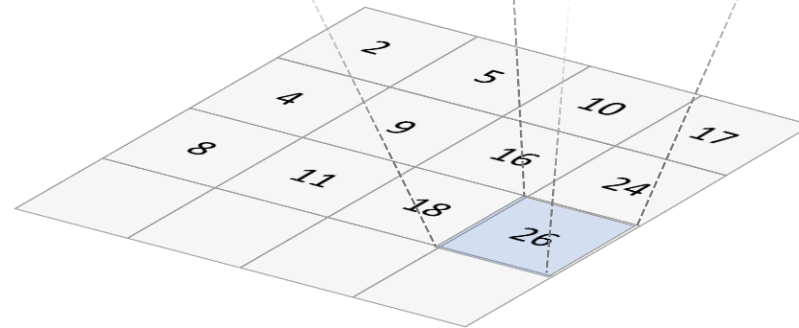
OUTPUT

KERNEL

INPUT

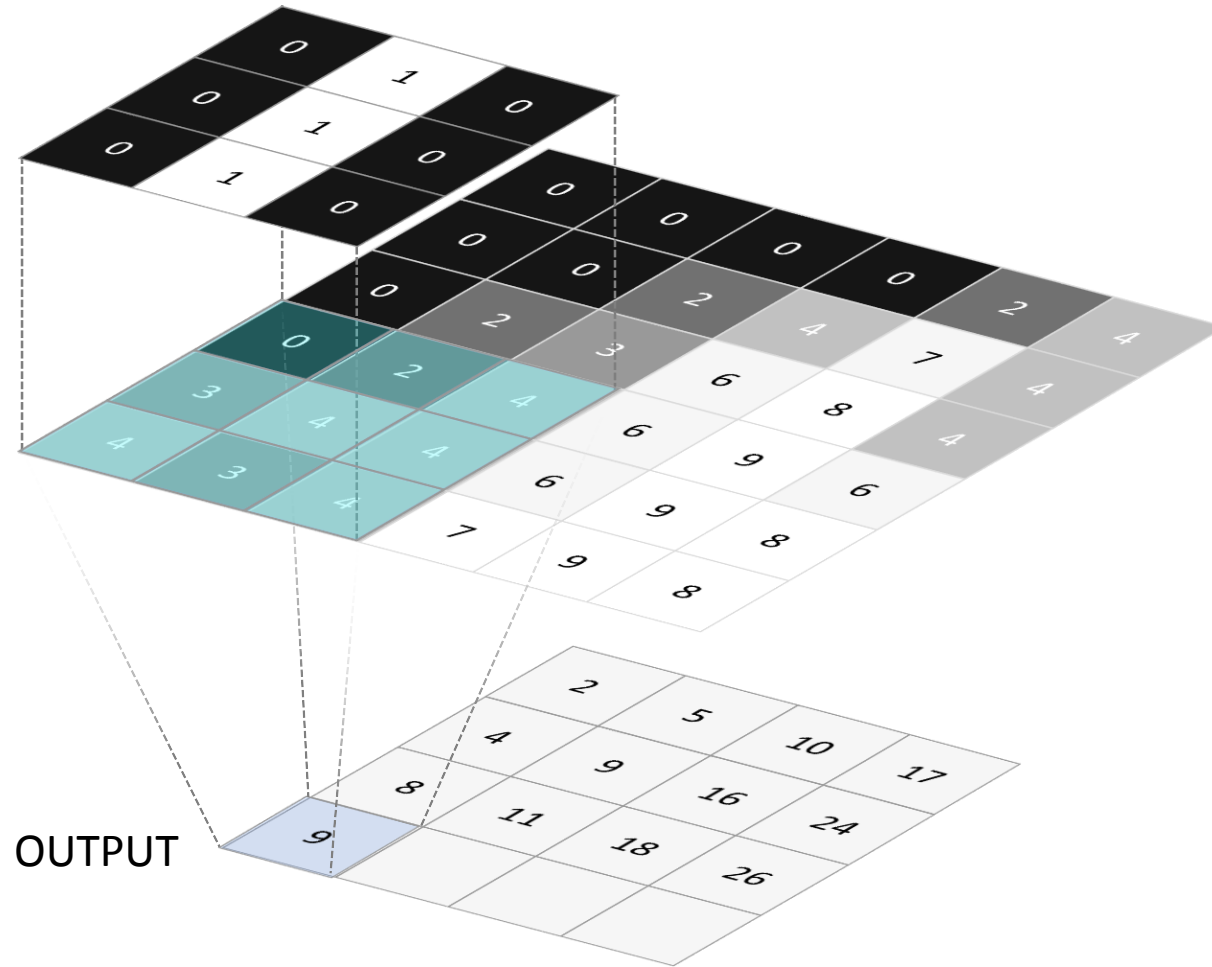


OUTPUT



KERNEL

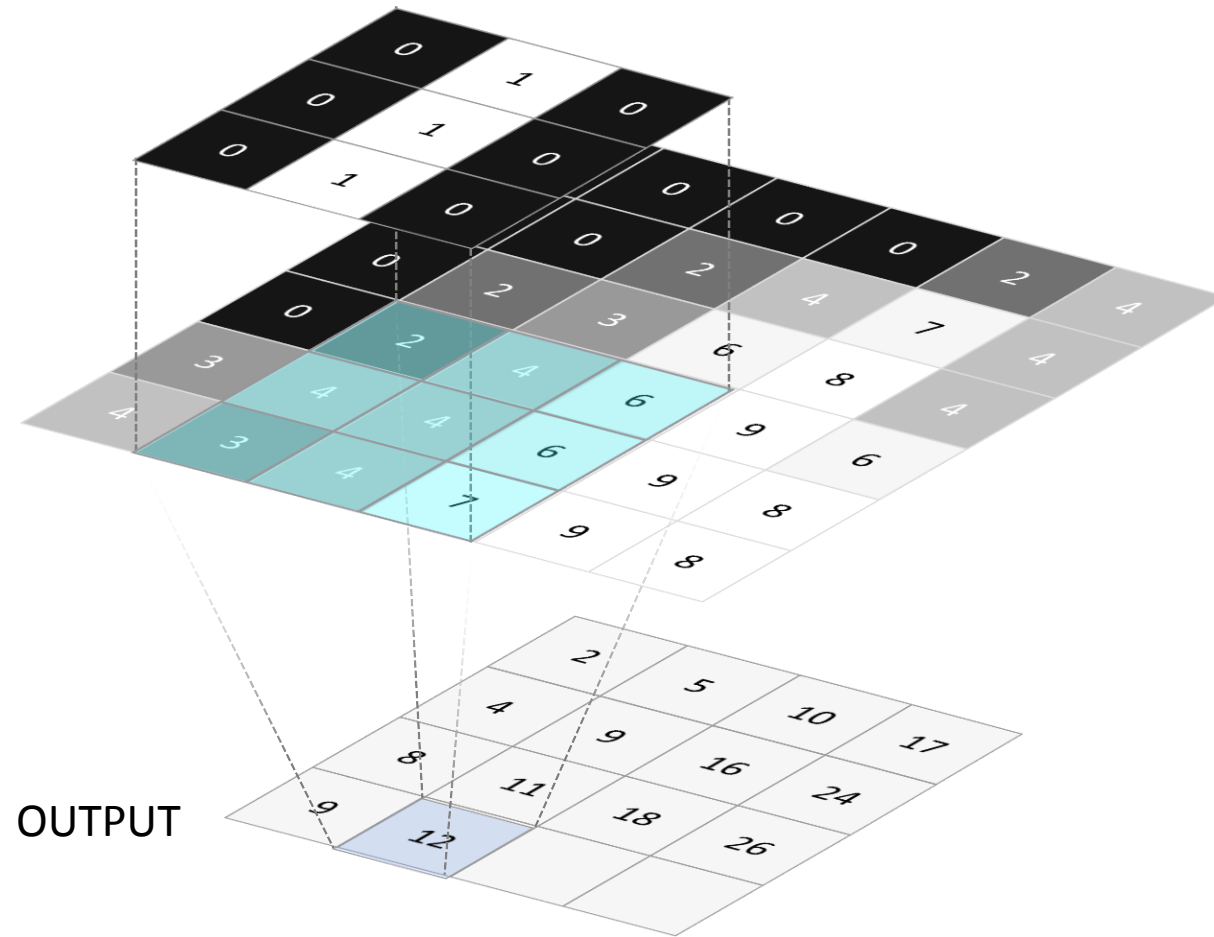
INPUT



OUTPUT

KERNEL

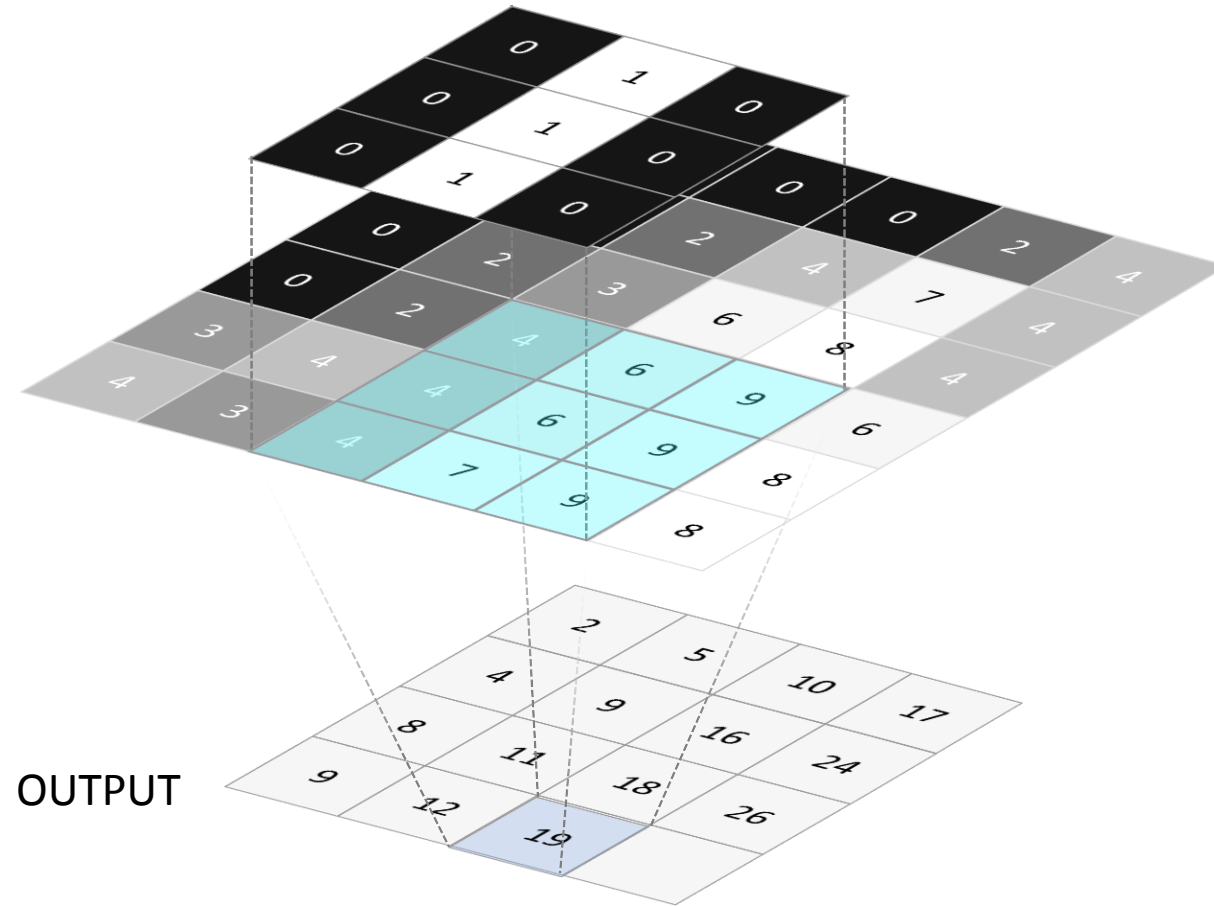
INPUT



OUTPUT

KERNEL

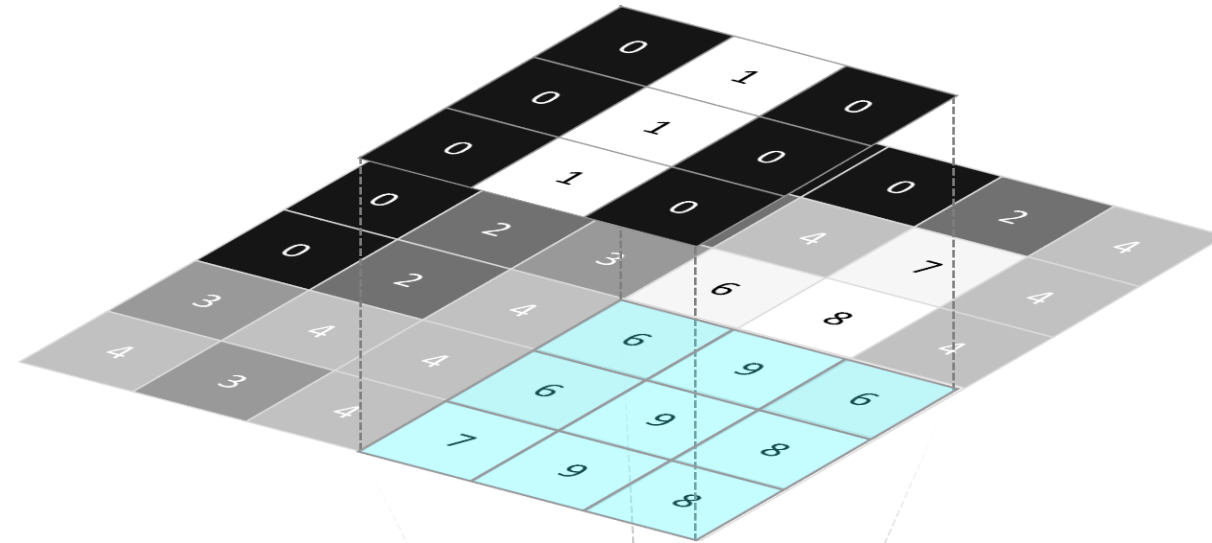
INPUT



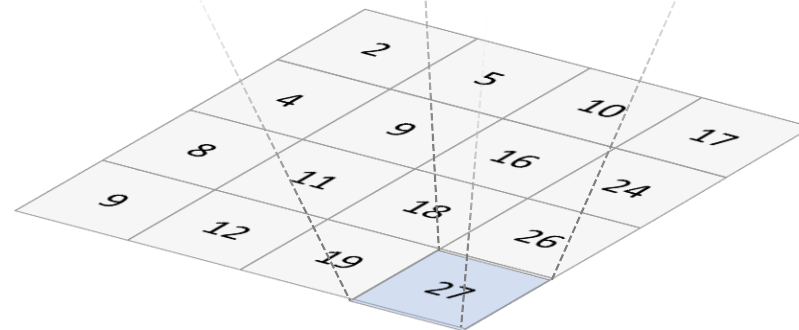
OUTPUT

KERNEL

INPUT



OUTPUT



2	5	10	17
4	9	16	25
8	11	18	26
9	12	19	27

