Input

$$egin{bmatrix} 1 & 2 & 0 & 1 & 3 \ 4 & 1 & 0 & 2 & 1 \ 2 & 3 & 1 & 0 & 1 \ 1 & 2 & 0 & 1 & 3 \ 3 & 1 & 2 & 3 & 0 \ \end{bmatrix}$$

Kernal

$$egin{bmatrix} 1 & 0 & -1 \ 1 & 0 & -1 \ 1 & 0 & -1 \ \end{bmatrix}$$

Output

3

Output(1,2) = (2×1)+(0×0)+(1×-1)+(1×1)+(0×0)+(2×-1)+(3×1)+(1×0)+(0×-1) =2+0-1+1+0-2+3+0-0



$$egin{bmatrix} 1 & 2 & 0 & 1 & 3 \ 4 & 1 & 0 & 2 & 1 \ 2 & 3 & 1 & 0 & 1 \ 1 & 2 & 0 & 1 & 3 \ 3 & 1 & 2 & 3 & 0 \ \end{bmatrix}$$

Kernal

$$egin{bmatrix} 1 & 0 & -1 \ 1 & 0 & -1 \ 1 & 0 & -1 \ \end{pmatrix}$$

3



$$egin{bmatrix} 1 & 2 & 0 & 1 & 3 \ 4 & 1 & 0 & 2 & 1 \ 2 & 3 & 1 & 0 & 1 \ 1 & 2 & 0 & 1 & 3 \ 3 & 1 & 2 & 3 & 0 \ \end{bmatrix}$$

Xernal

$$egin{bmatrix} 1 & 0 & -1 \ 1 & 0 & -1 \ 1 & 0 & -1 \ \end{bmatrix}$$

3



$$egin{bmatrix} 1 & 2 & 0 & 1 & 3 \ 4 & 1 & 0 & 2 & 1 \ 2 & 3 & 1 & 0 & 1 \ 1 & 2 & 0 & 1 & 3 \ 3 & 1 & 2 & 3 & 0 \ \end{bmatrix}$$

$$egin{bmatrix} 1 & 0 & -1 \ 1 & 0 & -1 \ 1 & 0 & -1 \ \end{bmatrix}$$

3



$$egin{bmatrix} 1 & 2 & 0 & 1 & 3 \ 4 & 1 & 0 & 2 & 1 \ 2 & 3 & 1 & 0 & 1 \ 1 & 2 & 0 & 1 & 3 \ 3 & 1 & 2 & 3 & 0 \ \end{bmatrix}$$

Xernal

$$egin{bmatrix} 1 & 0 & -1 \ 1 & 0 & -1 \ 1 & 0 & -1 \ \end{pmatrix}$$

3



5×6
Input

$$egin{bmatrix} 1 & 2 & 0 & 1 & 3 \ 4 & 1 & 0 & 2 & 1 \ 2 & 3 & 1 & 0 & 1 \ \end{bmatrix}$$

Xernal

$$egin{bmatrix} 1 & 0 & -1 \ 1 & 0 & -1 \ 1 & 0 & -1 \ \end{bmatrix}$$

3



5×6 Input

$$egin{bmatrix} 1 & 2 & 0 & 1 & 3 \ 4 & 1 & 0 & 2 & 1 \ 2 & 3 & 1 & 0 & 1 \ 1 & 2 & 0 & 1 & 3 \ \end{bmatrix}$$

input - kernal + 1

$$egin{bmatrix} 1 & 0 & -1 \ 1 & 0 & -1 \ 1 & 0 & -1 \end{bmatrix}$$

Output

3



$$egin{bmatrix} 1 & 2 & 0 & 1 & 3 \ 4 & 1 & 0 & 2 & 1 \ 2 & 3 & 1 & 0 & 1 \ 1 & 2 & 0 & 1 & 3 \ 3 & 1 & 2 & 3 & 0 \ \end{bmatrix}$$

Xernal

$$egin{bmatrix} 1 & 0 & -1 \ 1 & 0 & -1 \ 1 & 0 & -1 \ \end{bmatrix}$$

3

Output(1,2) =
$$(2\times1)+(0\times0)+(1\times-1)+(1\times1)+(0\times0)+(2\times-1)+(3\times1)+(1\times0)+(0\times-1)$$

=2+0-1+1+0-2+3+0-0



$$egin{bmatrix} 1 & 2 & 0 & 1 & 3 \ 4 & 1 & 0 & 2 & 1 \ 2 & 3 & 1 & 0 & 1 \ 1 & 2 & 0 & 1 & 3 \ 3 & 1 & 2 & 3 & 0 \ \end{bmatrix}$$

$$\begin{bmatrix} 1 & 0 & -1 \\ 1 & 0 & -1 \\ 1 & 0 & -1 \end{bmatrix}$$

3

Output(1,2) =
$$(2\times1)+(0\times0)+(1\times-1)+(1\times1)+(0\times0)+(2\times-1)+(3\times1)+(1\times0)+(0\times-1)$$

=2+0-1+1+0-2+3+0-0



5×6 Input

$$egin{bmatrix} 1 & 2 & 0 & 1 & 3 \ 4 & 1 & 0 & 2 & 1 \ 2 & 3 & 1 & 0 & 1 \ 1 & 2 & 0 & 1 & 3 \ 3 & 1 & 2 & 3 & 0 \ \end{bmatrix}$$

input - kernal + 1

$$\begin{array}{c|cccc}
\hline
1 & 0 & -1 \\
\hline
1 & 0 & -1 \\
1 & 0 & -1
\end{array}$$

Output

3

Output(1,2) =
$$(2\times1)+(0\times0)+(1\times-1)+(1\times1)+(0\times0)+(2\times-1)+(3\times1)+(1\times0)+(0\times-1)$$

=2+0-1+1+0-2+3+0-0



Input

1	2	0	1	3^{-}
4	$egin{array}{c} 2 \\ 1 \\ 3 \end{array}$	0 0 1	1 2 0	1
$egin{array}{c} 1 \ 4 \ 2 \ 1 \ 3 \end{array}$	3		0	1
1	2	0	1 3	3
$\lfloor 3$	1	2	3	3 1 1 3 0

Kernal

$$egin{bmatrix} 1 & 0 & -1 \ 1 & 0 & -1 \ 1 & 0 & -1 \ \end{bmatrix}$$

Output



Input

1	2	0	1	3^{T}
4	$egin{array}{c} 2 \\ 1 \\ 3 \end{array}$	$egin{array}{c} 0 \ 0 \ 1 \ \end{array}$	1 2 0	1
$egin{array}{c} 1 \\ 4 \\ 2 \\ 1 \end{array}$	3	1	0	3 1 1 3 0
1	2	0	1	3
3	1	2	3	0

Kernal

$$egin{bmatrix} 1 & 0 & -1 \ 1 & 0 & -1 \ 1 & 0 & -1 \ \end{bmatrix}$$

Output



Input

1	2	0	1	3
4	1	0	2	1 1
4 2	3	1	0	1
1	2	0	1	3
$\lfloor 3$	1	2	3	0

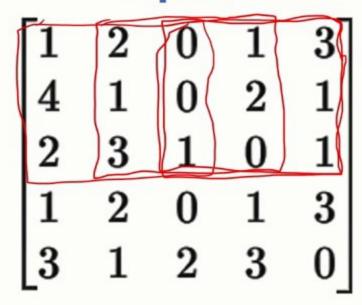
Kernal

$$egin{bmatrix} 1 & 0 & -1 \ 1 & 0 & -1 \ 1 & 0 & -1 \ \end{bmatrix}$$

Output



Input



Kernal

$$egin{bmatrix} 1 & 0 & -1 \ 1 & 0 & -1 \ 1 & 0 & -1 \ \end{bmatrix}$$

Output



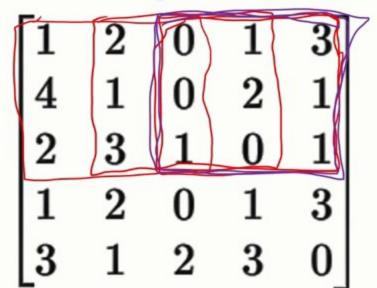








5 大ら Input



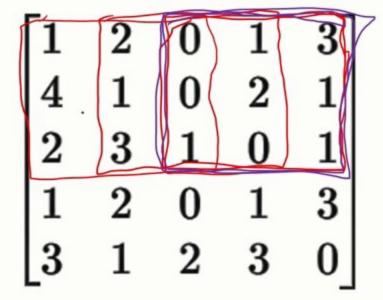
5-3+1.

Kernal

$$egin{bmatrix} 1 & 0 & -1 \ 1 & 0 & -1 \ 1 & 0 & -1 \ \end{bmatrix}$$

Output 3x3





Kernal

$$egin{bmatrix} 1 & 0 & -1 \ 1 & 0 & -1 \ 1 & 0 & -1 \end{bmatrix}$$

JX3 Output



$$egin{bmatrix} 1 & 2 & 0 & 1 & 3 \ \hline 4 & 1 & 0 & 2 & 1 \ 2 & 3 & 1 & 0 & 1 \ 1 & 2 & 0 & 1 & 3 \ 3 & 1 & 2 & 3 & 0 \ \end{bmatrix}$$

Kernal

$$egin{bmatrix} 1 & 0 & -1 \ 1 & 0 & -1 \ 1 & 0 & -1 \ \end{bmatrix}$$

JX3 Output

