

Step 1: Overlay the filter to the input, perform element-wise multiplication, and sum the result

Input (6x6)

4	9	2	5	8	3
5	6	2	4	0	3
2	4	5	4	5	2
5	6	5	4	7	8
5	7	7	9	2	1
5	8	5	3	8	4

Filter

1	0	-1
1	0	-1
1	0	-1



Parameters

Size	3
Stride	1
Padding	0

Output

2			

=

$$2 = (4 * 1) + (9 * 0) + (2 * -1) + (5 * 1) + (6 * 0) + (2 * -1) + (2 * 1) + (4 * 0) + (5 * -1)$$

