

Aurpa Datta

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Input

$$\begin{matrix} 0 & 1 & 1 & 0 & 1 \\ 0 & 1 & 1 & 0 & 1 \\ 0 & 1 & 1 & 0 & 1 \\ 0 & 1 & 1 & 0 & 1 \\ 0 & 1 & 1 & 0 & 1 \end{matrix}$$

Padding = 1

$$\begin{matrix} 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 1 & 0 & 1 & 0 \\ 0 & 0 & 1 & 1 & 0 & 1 & 0 \\ 0 & 0 & 1 & 1 & 0 & 1 & 0 \\ 0 & 0 & 1 & 1 & 0 & 1 & 0 \\ 0 & 0 & 1 & 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 \end{matrix}$$

Padding + Filter 1

$$\begin{matrix} 1 & 0 & 1 & 3 & 2 & 3 & 2 & 3 & 1 \\ 1 & 1 & 1 & = & 3 & 4 & 3 & 5 & 1 \\ 0 & 0 & 1 & & 3 & 4 & 3 & 5 & 1 \\ & & & & 3 & 4 & 3 & 5 & 1 \\ & & & & 2 & 3 & 3 & 4 & 1 \end{matrix}$$

Padding + filter 2

0 0 0 0 0 0
0 0 1 1 0 1 0

0 0 1 1 0 1 0
0 0 1 1 0 1 0 × 0 1 1 =

0 0 1 1 0 1 0

0 0 1 1 0 1 0

0 0 0 0 0 0 0

0 1 0 1 1 0 0

1 2 2 2 1 0

2 3 2 3 1

2 3 2 3 1

2 3 2 3 1
1 1 2 0

filter 2 1 0

2 3 2 3 1

+ 3 4 3 5 1
3 4 3 5 1 =

3 4 3 5 1 0 1
2 3 3 4 2 1 1

1 0 0 0 0 0 0

1 0 0

3 5 4 5 2 e e

5 7 5 8 2 e e

5 7 5 8 2

5 7 5 8 2

3 4 9 6 1

Soest + Brüder

Max Pooling 2×2

7 7 8 8

7 7 8 8

7 7 8 8

7 7 8 8

Ans.