# **Task 1.1 Convolution**

The original matrix is padded with zero below:

Icon

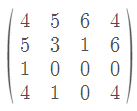
Description automatically generated= A picture containing clock

Description automatically generated

# **Task 1.2 Non Linearity**

Applying: **ReLU(x)=max(0, X)**

A picture containing clock

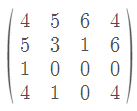
Description automatically generated= 

# **Task 1.3 Max Pooling**

Table

Description automatically generated with low confidence

A picture containing icon

Description automatically generated

= =

# **Task 1.4 Flattening**



=   
A picture containing icon

Description automatically generated

# **Task 1.5 Fully Connected Layer**

A picture containing text

Description automatically generatedA picture containing text, watch, clock

Description automatically generated

\* =

# **Task 1.6 SoftMax**

Text

Description automatically generated with medium confidence

A picture containing text

Description automatically generated

701673591209763173865

701673591209763173865

Total = 1403582578372837949239

Softmax\_30 = 7.6137127563329722021058033781959e-9

Softmax\_48 = 0.4999

Softmax\_40 = 1.6770318359885902911666797560085e-4

Softmax\_48 = 0.4999

**Link to GitHub (Practical):**  
[Advanced-Deep-Learning-D7047E/Practical\_1.ipynb at main · jamieomoya/Advanced-Deep-Learning-D7047E (github.com)](https://github.com/jamieomoya/Advanced-Deep-Learning-D7047E/blob/main/Exercise_1/Practical_1.ipynb)