CNN

(1) Input Image
- steps
- kernel → stride
  - If required we going to use → padding
- pooling
- flattening

3	3	2	1	0
0	0	1	3	1
3	1	2	2	3
2	0	0	2	2
2	0	0	0	1

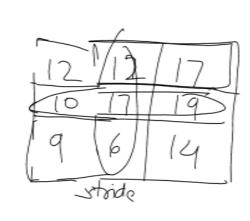5×5 Input Image

Stride = 1
= 2
= 3

0	1	2
2	2	0
0	1	2

Kernel / filter
3×3
F·M

Stride = 1

=

12	12	17
10	17	19
9	6	14

3×3
Feature Map

Max Pooling

Avg Pooling

Stride = 1

17	19
17	19

12·7	16·2
10·5	14

Pooling
2×2

Feature Extraction

17
19
17
19

flattening

FF N/W

5x5 Input
stride=2

stride
12	12	17
10	17	9
9	6	14

| 12 | 17 |
| 9 | 14 |

7×7 Input
Stride=1
max pooling

0	0	0	0	0	0	0
0	3	3	2	1	0	0
0	0	0	1	3	1	0
0	3	1	2	2	3	0
0	2	0	0	2	2	0
0	2	0	0	0	1	0
0	0	0	0	0	0	0

3×3 Kernel
0	1	2
2	2	0
0	1	2

5×5 Feature Map
6	14	17	11	3
14	12	12	17	11
8	10	17	19	13
11	9	6	14	12
6	4	4	6	4

4×4 max pooling
14	17	17	17
14	17	19	19
11	17	19	19
11	9	14	14

flattening
| 14 |
| 17 |
| 17 |
| 17 |
| 14 |
| 17 |
| 19 |
| 19 |
| 11 |
| 17 |
| 19 |
| 19 |
| 11 |
| 9 |
| 14 |
| 14 |

| class1 |
| class2 |
| class3 |