Introduction to Deep Learning (CS474)

Lecture 16

Rupam

Outline

- **Module 2**
  - Discussion on ConvNet

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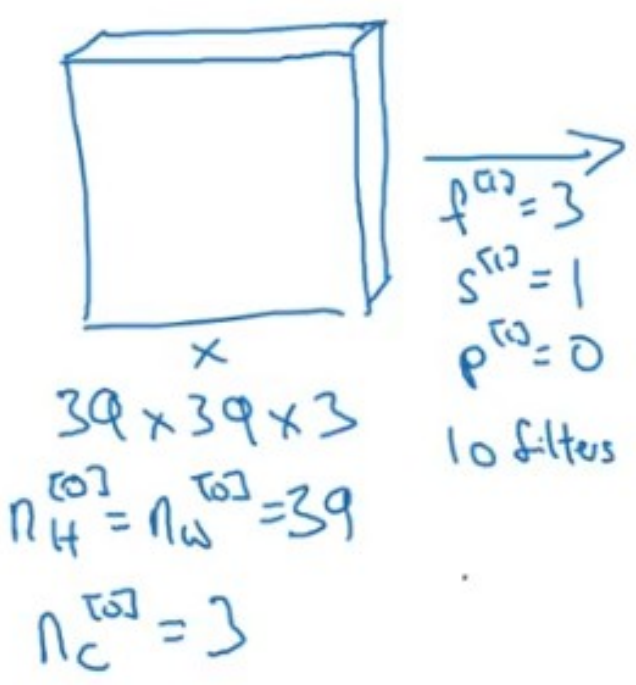
Building a ConvNet



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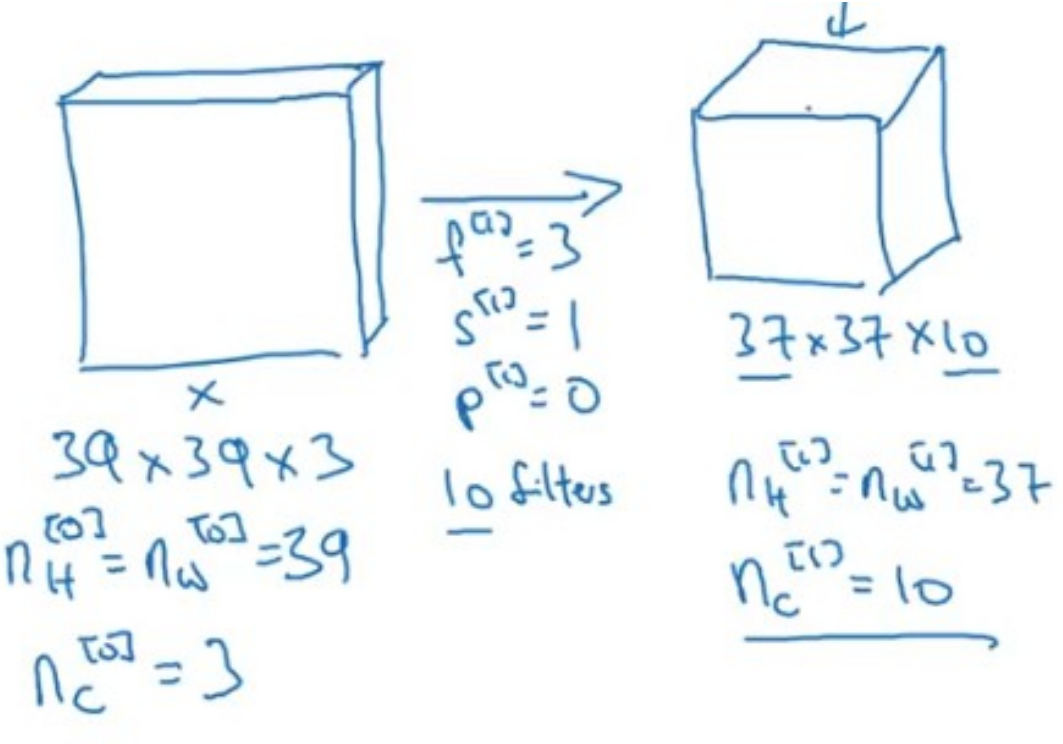
Building a ConvNet



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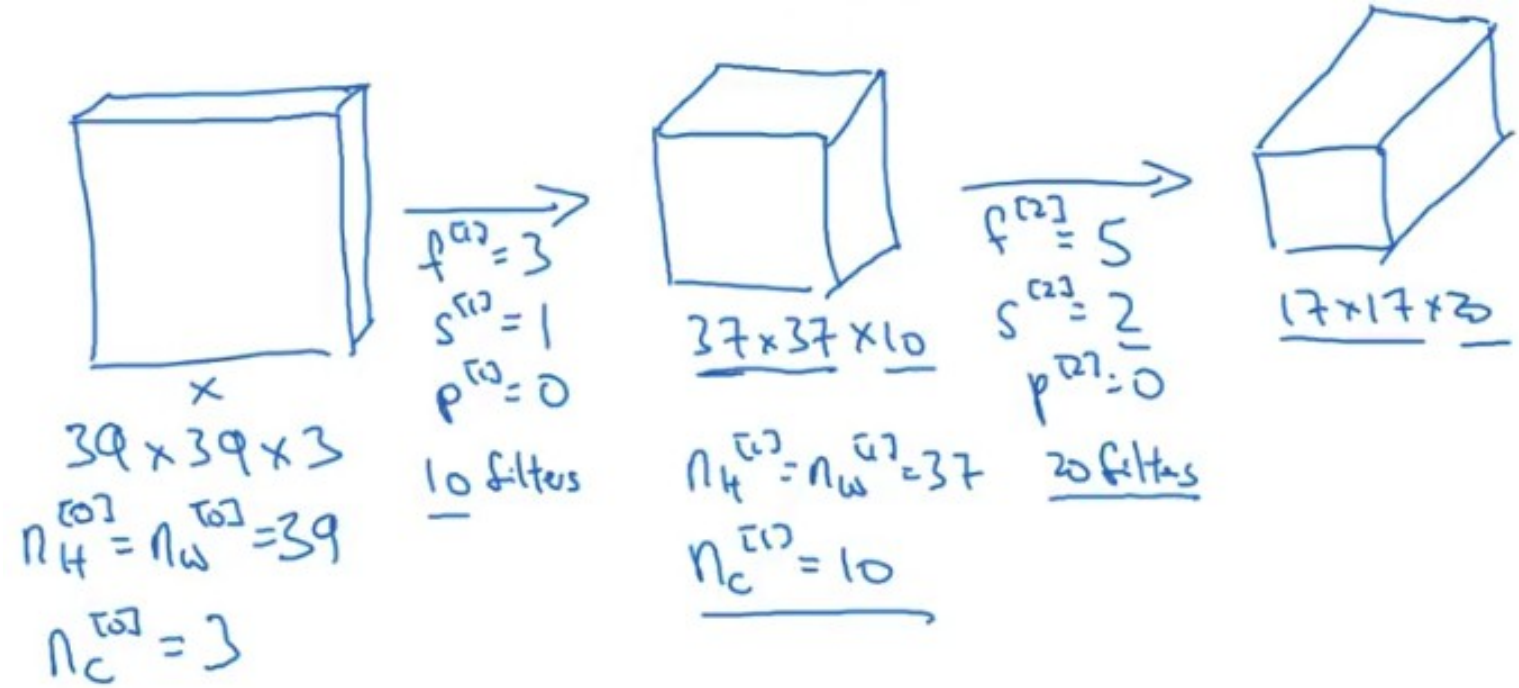
Building a ConvNet



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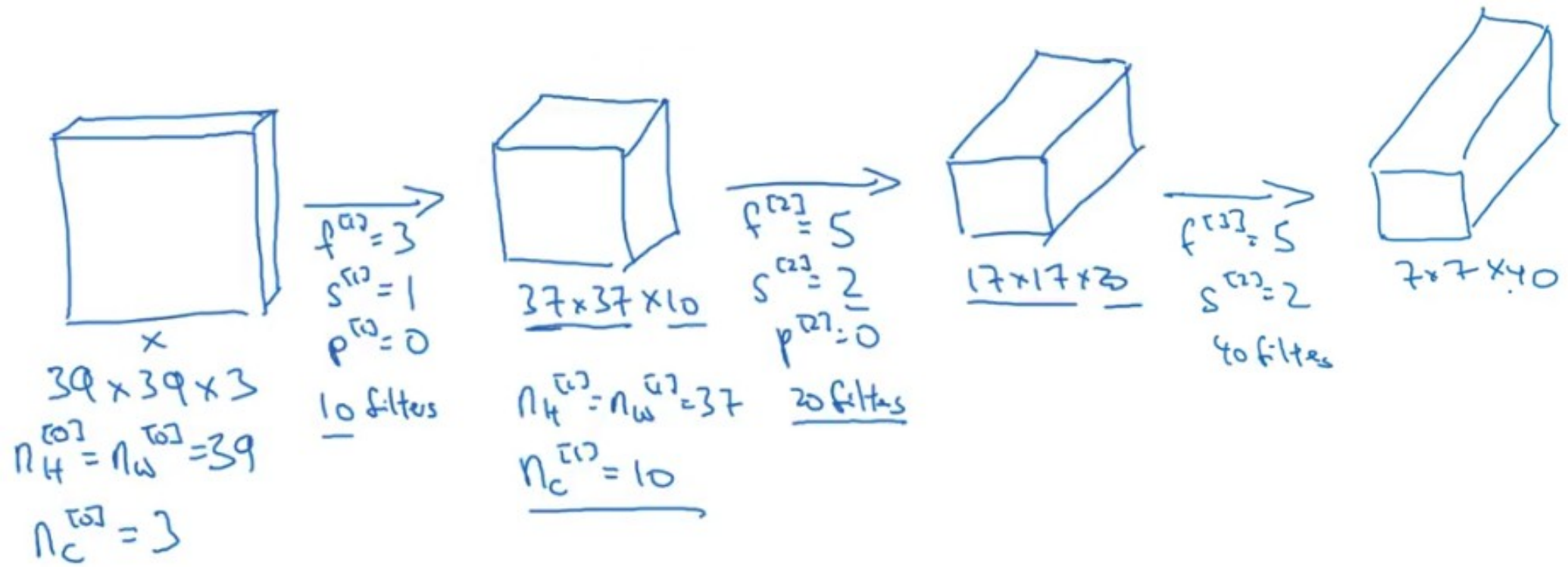
Building a ConvNet



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Types of Layer in a ConvNet

- Convolution
- Pooling
- Fully connected

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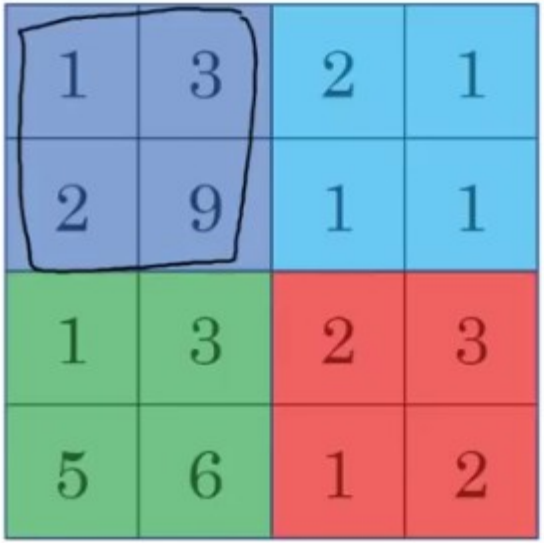
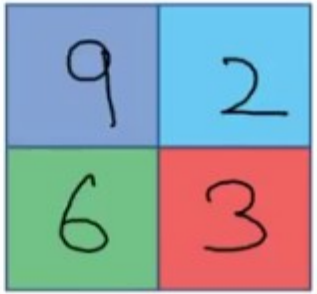
Pooling Layer: Max pooling





Hyperparameters:

$f = 2$

$s = 2$

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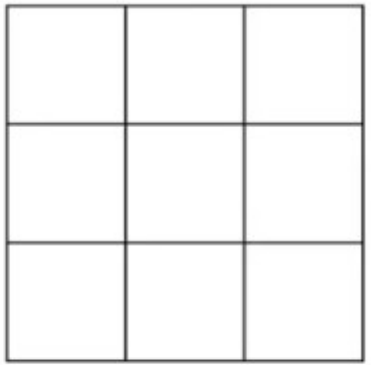
Pooling Layer: Max pooling

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

5×5



f = 3

s = 1

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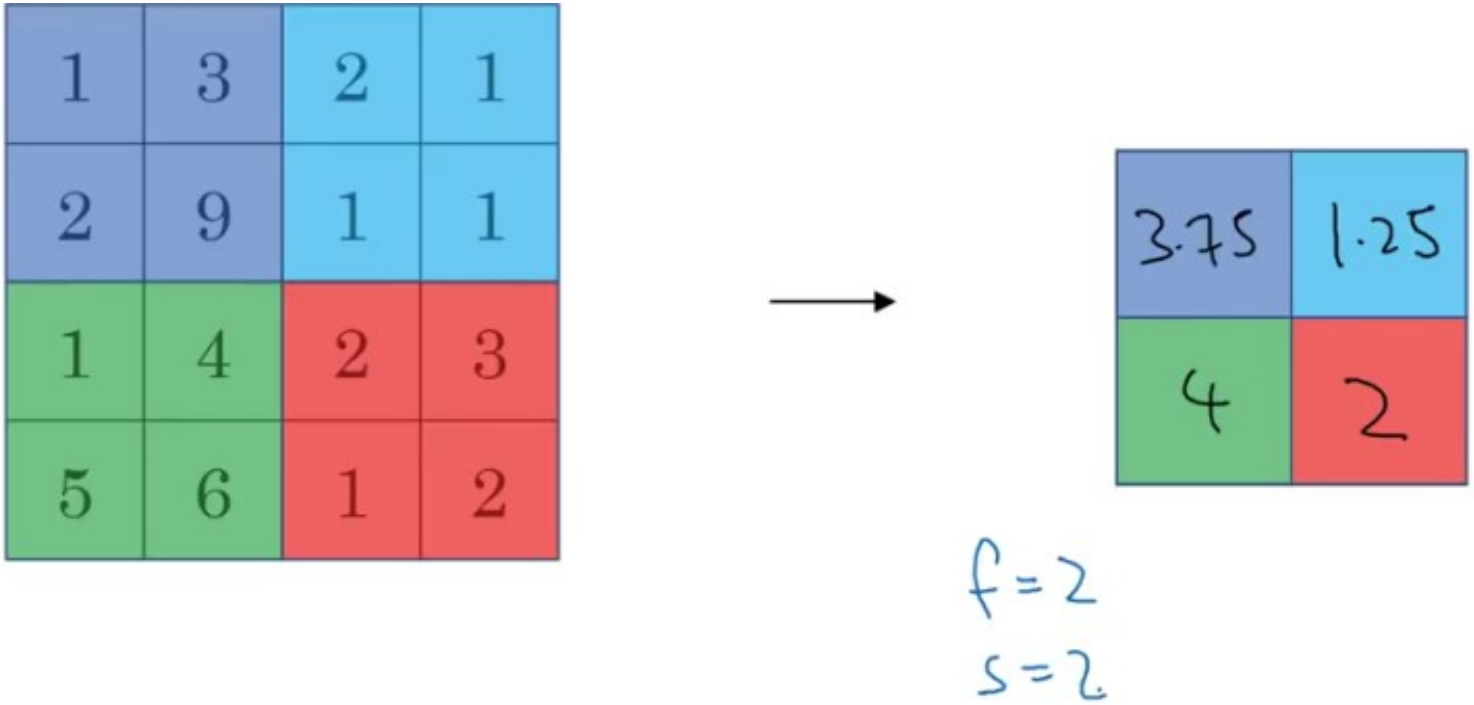
Pooling Layer: Average pooling



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Summary of pooling

Hyperparameters:

f : filter size

s : stride

Max or average pooling

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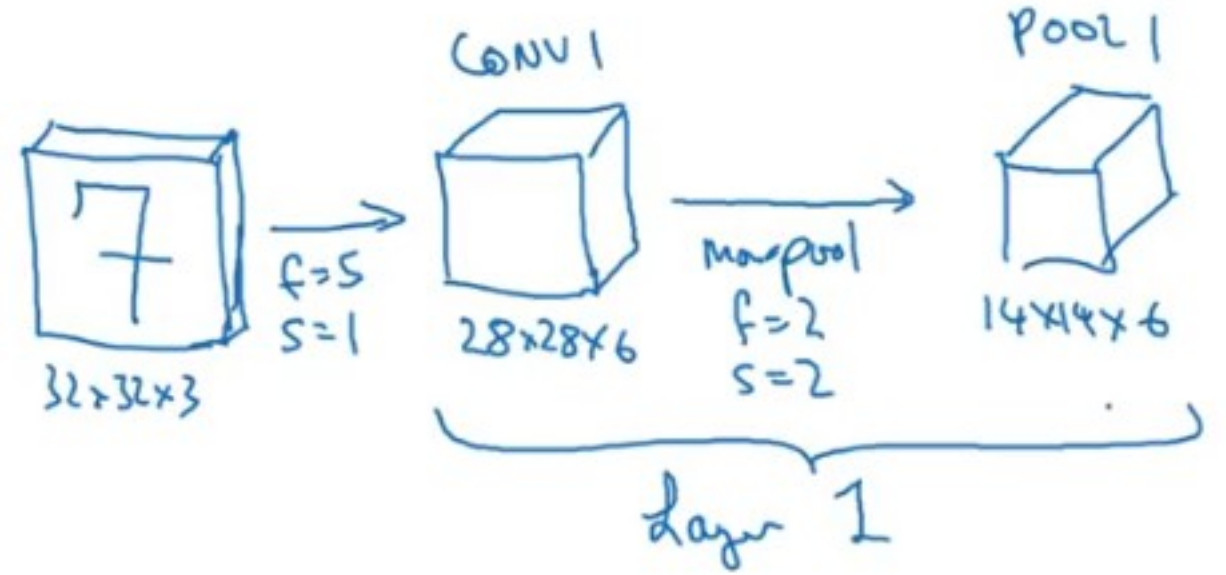
Building a Neural Network



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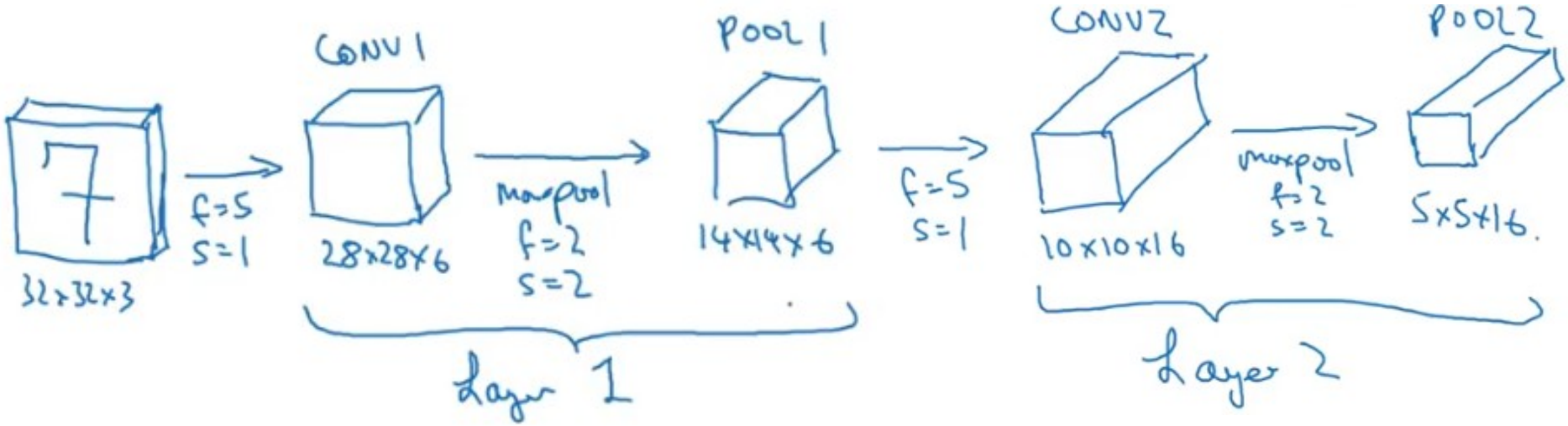
Building a Neural Network



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References

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