SMAI A6

2018201082

Assignment 6

1 Q 2.1

The number of parameters in the Layer 1 of Convolution is :
(5 * 5 * 1) * 6 + 6 * 1 = 156
(n * m * c) * dimensions + bias (= number of Dimension)

2 Q 2.2

Polling replaces neighbourhood by its maximum value, so no parameters are learned.

3 Q 2.3

Fully Connected Layer learns the maximum parameters.
If there are n inputs and m outputs, there are (n+1)*m parameters you need to learn

4 Q 2.4

If we consider Memory required for a forward pass :
Fully Connected Layers will consume the maximum memory.
As the number of parameters to be learned are much high.
For a detailed example : Reference Link

5 Q 2.5

Given we have only implemented forward pass we cannot comment on which activation works best. However ReLu performed better because the images and features shown at each step was quite observable.v Reference Link