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## Course outline

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## Week 5: Assignment 5

Your last recorded submission was on 2024-08-28, 23:45 IST

Due date: 2024-08-28, 23:59 IST.

### Instructions:

- Starter code for this assignment is provided in [DL4CV-Prog-Assignment2-Week-3-2024.ipynb](#).
- Use Python 3.x to run the notebook. As instructed in the notebook, write your code only in between the lines "YOUR CODE STARTS HERE" and "YOUR CODE ENDS HERE".

- Do not change anything else in the code; if you do, the answers you are supposed to get at the end of this assignment might be wrong.
- Read documentation of each function carefully.
- All the best!

1) For this question, please see Question 1 in the iPython notebook (.ipynb file) provided alongside. Complete your implementation under the "YOUR CODE STARTS HERE" segment therein. What is the size of parameter matrix corresponding to convolution layer of second sequential block ? **1 point**

- ☐ 32x16x5x5
- ☐ 32x32x6x6
- ☒ 16x32x7x7
- ☐ 32x16x4x4

2) For this question, please see Question 2 in the iPython notebook (.ipynb file) provided alongside. Complete your implementation under the "YOUR CODE STARTS HERE" segment therein. Report the final test accuracy displayed above (If you are not getting the exact number shown in options, please report the closest number). **1 point**

- ☐ 84%
- ☐ 76%
- ☒ 99%
- ☐ 57%

3) For this question, please see Question 3 in the iPython notebook (.ipynb file) provided alongside. Complete your implementation under the "YOUR CODE STARTS HERE" segment therein. Report the loss value at the step 1800? (If you are not getting the exact number shown in options, please report the closest number). **1 point**

- ☒ 0.0042
- ☐ 0.15
- ☐ 0.00065
- ☐ 1.4

4) For this question, please see Question 4 in the iPython notebook (.ipynb file) provided alongside. Complete your implementation under the "YOUR CODE STARTS HERE" segment therein. Embedding of which class/digit is closest to the embedding of 7? **1 point**

- ☐ 3
- ☐ 5
- ☒ 8
- ☐ 1

5) For this question, please see Question 5 in the iPython notebook (.ipynb file) provided alongside. Complete your implementation under the "YOUR CODE STARTS HERE" segment therein. Embedding of which class/digit is farthest to the embedding of 4? **1 point**

- ☐ 1
- ☐ 6
- ☐ 9
- ☒ 3

6) For this question, please see Question 6 in the iPython notebook (.ipynb file) provided alongside. Complete your implementation under the "YOUR CODE STARTS HERE" segment therein. What is the shape of filters variable? **1 point**

- ☐ (32, 16 , 5, 5)
- ☒ (32, 1, 5, 5)
- ☐ (16, 32, 5, 5)
- ☐ (16, 1)

You may submit any number of times before the due date. The final submission will be considered for grading.

Submit Answers

