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NPTEL (<https://swayam.gov.in/explorer?ncCode=NPTEL>) » **Deep Learning for Computer Vision**
(course)



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Course
outline

**How does an
NPTEL
online
course
work? ()**

Week 0 ()

Week 1 ()

Week 2 ()

Week 3 ()

Week 4 ()

Week 4: Programming Quiz 1

Assignment not submitted

Due date: 2023-08-23, 23:59 IST.**Instructions:**

- Starter code for this assignment is provided in DL4CV Assignment 1 2023.ipynb (<https://drive.google.com/file/d/1tF2QdtCM88rf7YYXKkSAuBrdlqcseLTf/view?usp=sharing>).
- 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) **1 point**
provided alongside. Complete your implementation under the "YOUR CODE STARTS HERE"
segment therein. What is mean of the sum of final output1 and final output2 in programming
question 1? (Choose the closest value)

- ☐ 1000
- ☐ 2000
- ☐ 3000
- ☐ 4000

2) For this question, please see Question 2 in the iPython notebook (.ipynb file) **1 point**
provided alongside. Complete your implementation under the "YOUR CODE STARTS HERE"
segment therein. What is sum of the elements of the euclidian norm in programming question 2?
(Choose the closest value)

- ☐ 12000
- ☐ 13000
- ☐ 10000000

☐ Neural Networks: A Review - Part 1 (unit?unit=49&lesson=50)

☐ Neural Networks: A Review - Part 2 (unit?unit=49&lesson=51)

☐ Feedforward Neural Networks and Backpropagation - Part 1 (unit?unit=49&lesson=52)

☐ Feedforward Neural Networks and Backpropagation - Part 2 (unit?unit=49&lesson=53)

☐ Gradient Descent and Variants - Part 1 (unit?unit=49&lesson=54)

☐ Gradient Descent and Variants - Part 2 (unit?unit=49&lesson=55)

☐ Regularization in Neural Networks - Part 1 (unit?unit=49&lesson=56)

☐ Regularization in Neural Networks - Part 2 (unit?unit=49&lesson=57)

☐ Improving

☐ 20000000

3) For this question, please see Question 3 in the iPython notebook (.ipynb file) **1 point** provided alongside. Complete your implementation under the "YOUR CODE STARTS HERE" segment therein. What is gradient of w w.r.t loss function in programming question 3?

- ☐ [-4.4869, -2.1056, -3.4464]
☐ [4.4869, 2.1056, 3.4464]
☐ [-5.3670, -6.2075, -2.4481]
☐ [5.3670, 6.2075, 2.4481]

4) For this question, please see Question 4 in the iPython notebook (.ipynb file) **1 point** provided alongside. Complete your implementation under the "YOUR CODE STARTS HERE" segment therein. What are total number of parameters in the model in programming question 4?

- ☐ 8197
☐ 18521
☐ 8356
☐ 9105

5) For this question, please see Question 5 in the iPython notebook (.ipynb file) **1 point** provided alongside. Complete your implementation under the "YOUR CODE STARTS HERE" segment therein. Report the final train accuracy in programming question 5. (Choose the closest option)

- ☐ 58%
☐ 93%
☐ 100%
☐ 89%

6) For this question, please see Question 6 in the iPython notebook (.ipynb file) **1 point** provided alongside. Complete your implementation under the "YOUR CODE STARTS HERE" segment therein. Report the final test accuracy in programming question 6. (Choose the closest option)

- ☐ 30%
☐ 40%
☐ 10%
☐ 70%

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

Submit Answers

Training of Neural Networks - Part 1 (unit?unit=49&lesson=58)
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<input type="radio"/> Quiz: Week 4: Programming Quiz 1 (assessment?name=227)
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