CS 5720 Neural Network Deep Learning
ICP-3

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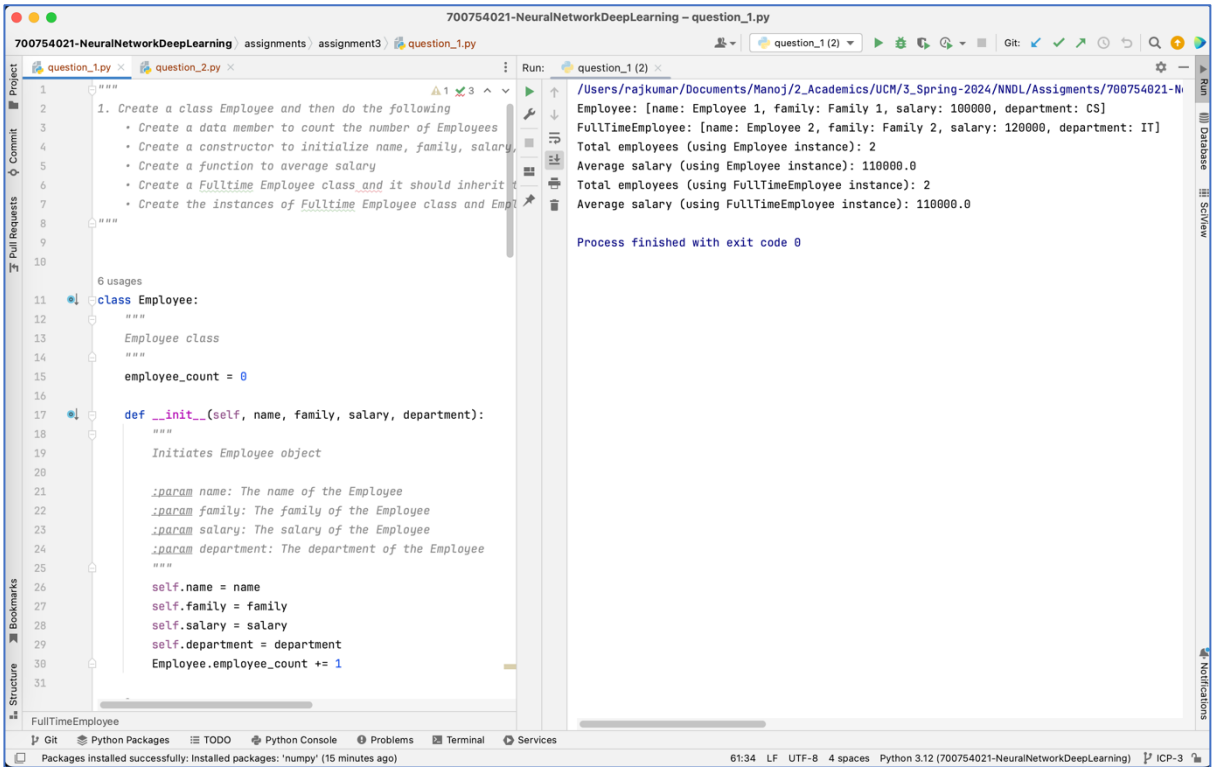
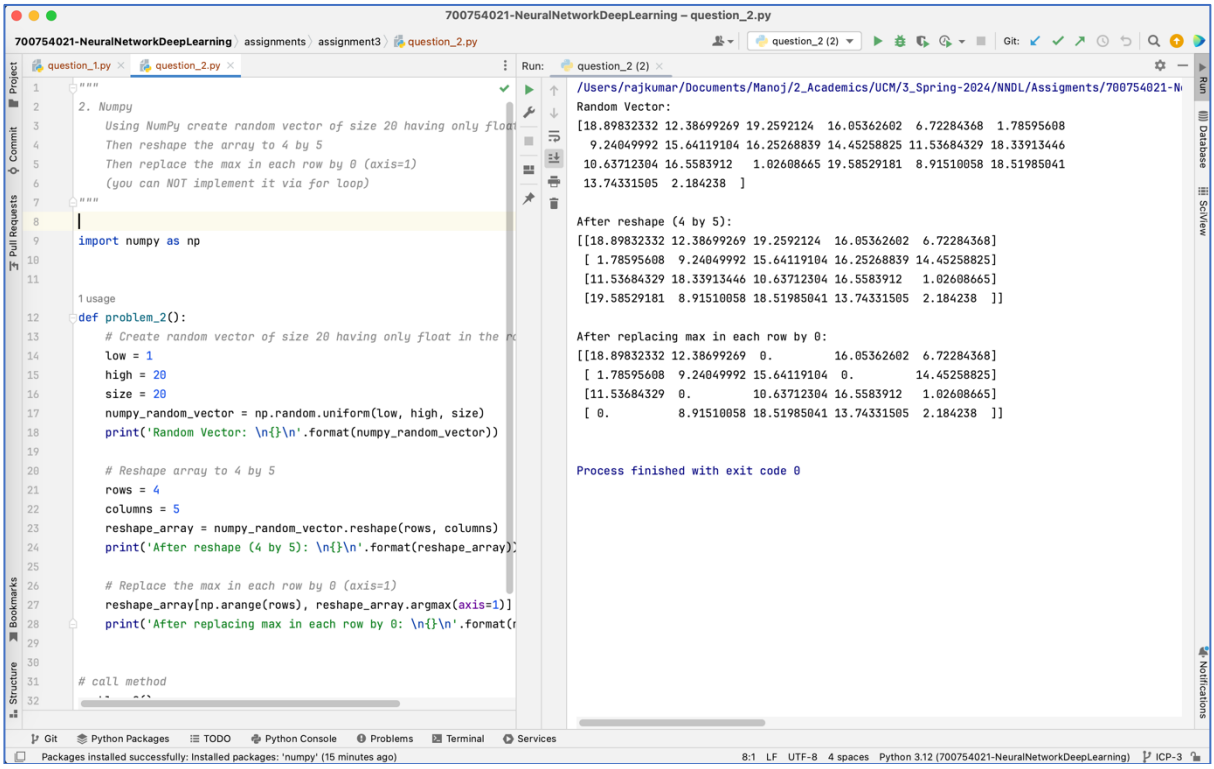
GitHub Repository:
https://github.com/mxb40210/700754021-NeuralNetworkDeepLearning

Assignment 3:
https://github.com/mxb40210/700754021-NeuralNetworkDeepLearning/tree/main/assignments/assignment3

1. Question 1



2. Question 2


700754021-NeuralNetworkDeepLearning – question_2.py
question_1.py
question_2.py
"""
2. Numpy
Using NumPy create random vector of size 20 having only float
Then reshape the array to 4 by 5
Then replace the max in each row by 0 (axis=1)
(you can NOT implement it via for loop)
"""
import numpy as np
1 usage
def problem_2():
# Create random vector of size 20 having only float in the r
low = 1
high = 20
size = 20
numpy_random_vector = np.random.uniform(low, high, size)
print('Random Vector: \n{}\n'.format(numpy_random_vector))
# Reshape array to 4 by 5
rows = 4
columns = 5
reshape_array = numpy_random_vector.reshape(rows, columns)
print('After reshape (4 by 5): \n{}\n'.format(reshape_array))
# Replace the max in each row by 0 (axis=1)
reshape_array[np.arange(rows), reshape_array.argmax(axis=1)]
print('After replacing max in each row by 0: \n{}\n'.format(r
call method
Run: question_2 (2)
/Users/rajkumar/Documents/Manoj/2_Academics/UCM/3_Spring-2024/NNDL/Assigments/700754021-N
Random Vector:
[18.89832332 12.38699269 19.2592124 16.05362602 6.72284368 1.78595608
9.24049992 15.64119104 16.25268839 14.45258825 11.53684329 18.33913446
10.63712304 16.5583912 1.02608665 19.58529181 8.91510058 18.51985041
13.74331505 2.184238]
After reshape (4 by 5):
[[18.89832332 12.38699269 19.2592124 16.05362602 6.72284368]
[1.78595608 9.24049992 15.64119104 16.25268839 14.45258825]
[11.53684329 18.33913446 10.63712304 16.5583912 1.02608665]
[19.58529181 8.91510058 18.51985041 13.74331505 2.184238]]
After replacing max in each row by 0:
[[18.89832332 12.38699269 0. 16.05362602 6.72284368]
[1.78595608 9.24049992 15.64119104 0. 14.45258825]
[11.53684329 0. 10.63712304 16.5583912 1.02608665]
[0. 8.91510058 18.51985041 13.74331505 2.184238]]
Process finished with exit code 0
Git
Python Packages
TODO
Python Console
Problems
Terminal
Services
Packages installed successfully: Installed packages: 'numpy' (15 minutes ago)
8:1 LF UTF-8 4 spaces Python 3.12 (700754021-NeuralNetworkDeepLearning) ICP-3