CS 5720 Neural Network Deep Learning
ICP-1

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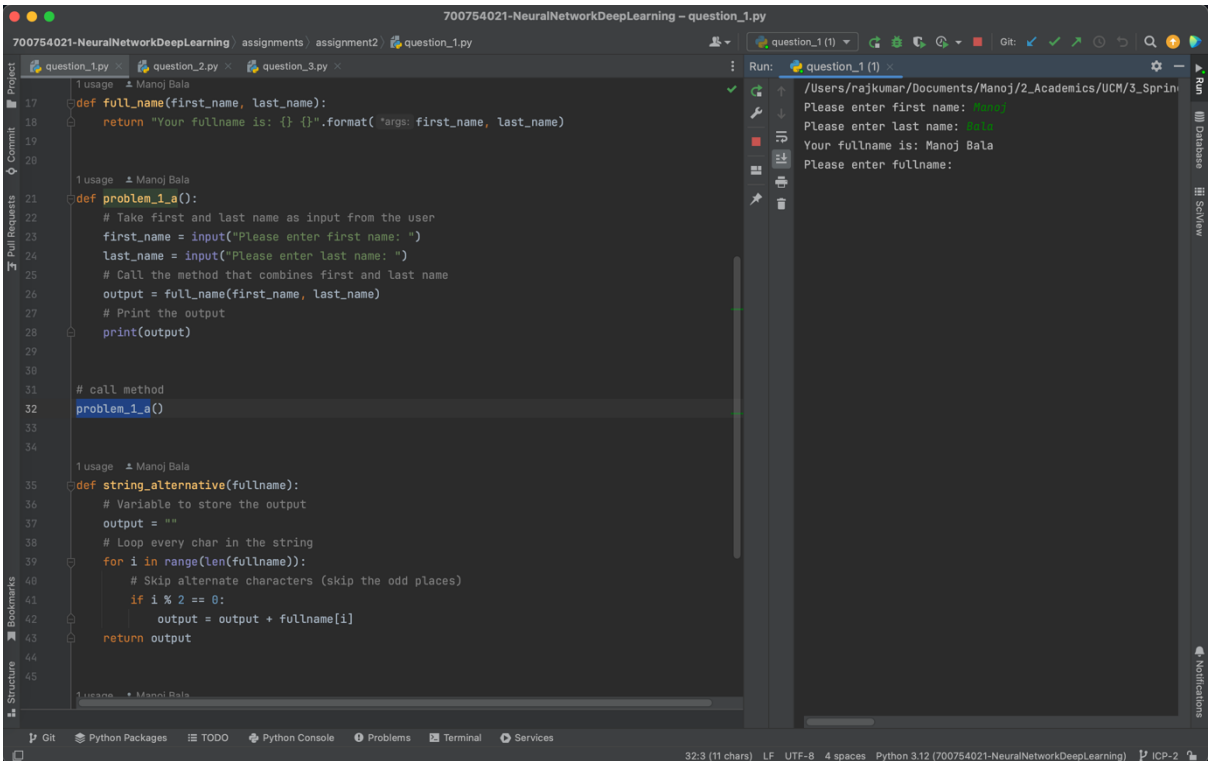
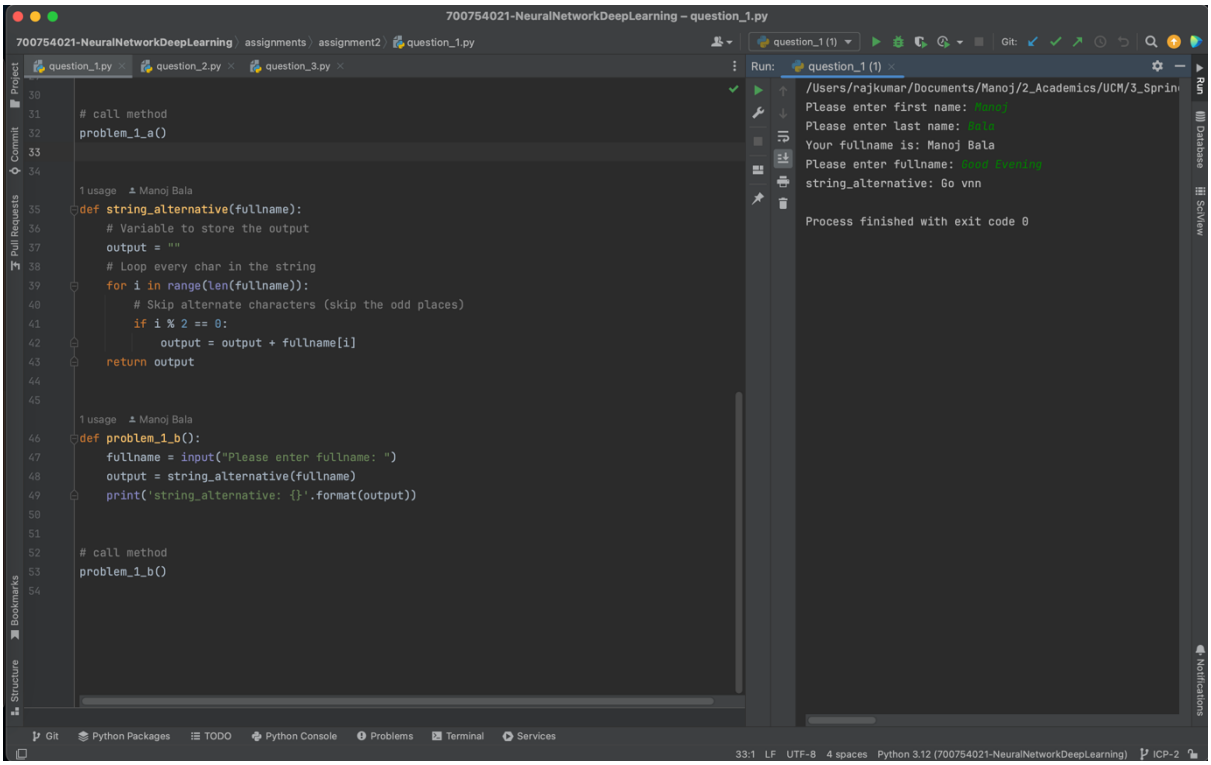
GitHub Repository:
https://github.com/mxb40210/700754021-NeuralNetworkDeepLearning

Assignment 2:
https://github.com/mxb40210/700754021-NeuralNetworkDeepLearning/tree/main/assignments/assigment2

1. Question 1




700754021-NeuralNetworkDeepLearning – question_1.py
question_1.py
question_2.py
question_3.py
# call method
problem_1_a()
1 usage Manoj Bala
def string_alternative(fullname):
# Variable to store the output
output = ""
# Loop every char in the string
for i in range(len(fullname)):
# Skip alternate characters (skip the odd places)
if i % 2 == 0:
output = output + fullname[i]
return output
1 usage Manoj Bala
def problem_1_b():
fullname = input("Please enter fullname: ")
output = string_alternative(fullname)
print('string_alternative: {}'.format(output))
# call method
problem_1_b()
Run: question_1 (1)
/Users/rajkumar/Documents/Manoj/2_Academics/UCM/3_Sprin
Please enter first name: Manoj
Please enter last name: Bala
Your fullname is: Manoj Bala
Please enter fullname: Good Evening
string_alternative: Go vnn
Process finished with exit code 0
Git
Python Packages
TODO
Python Console
Problems
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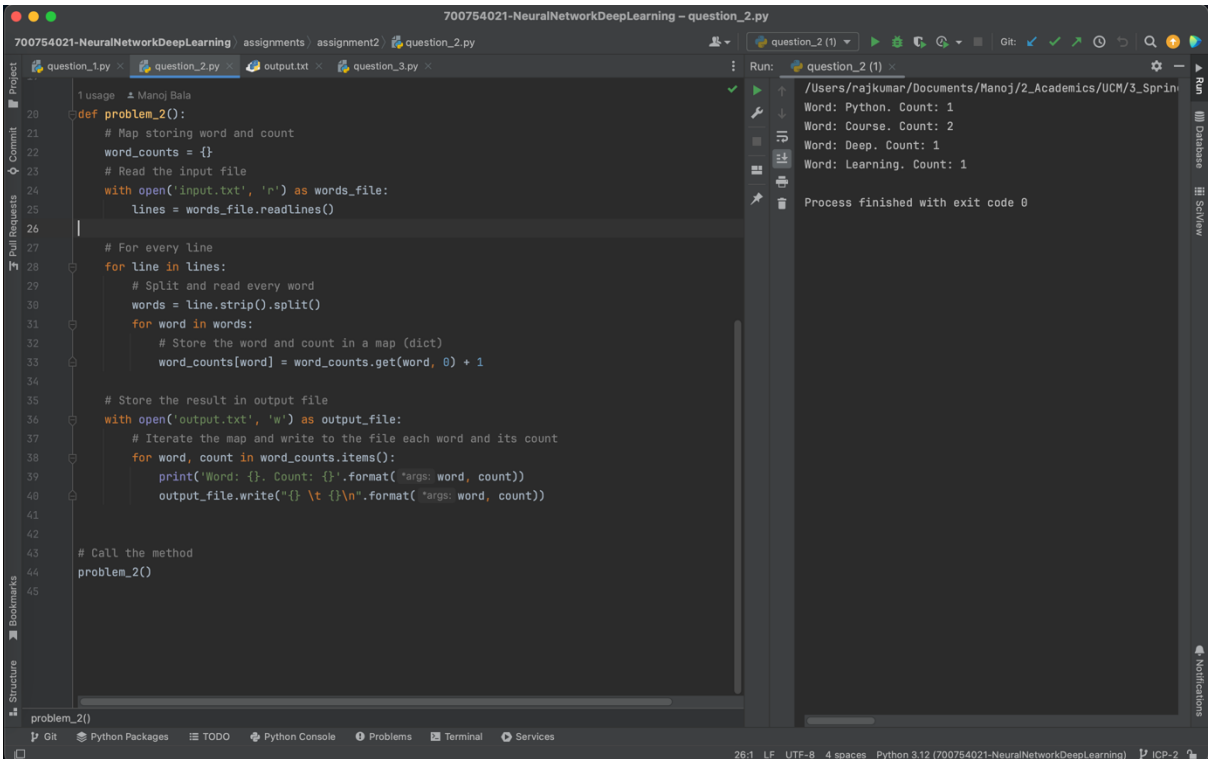
33:1 LF UTF-8 4 spaces Python 3.12 (700754021-NeuralNetworkDeepLearning) ICP-2

2. Question 2


700754021-NeuralNetworkDeepLearning – question_2.py
question_1.py
question_2.py
output.txt
question_3.py
1 usage Manoj Bala
def problem_2():
# Map storing word and count
word_counts = {}
# Read the input file
with open('input.txt', 'r') as words_file:
lines = words_file.readlines()
# For every line
for line in lines:
# Split and read every word
words = line.strip().split()
for word in words:
# Store the word and count in a map (dict)
word_counts[word] = word_counts.get(word, 0) + 1
# Store the result in output file
with open('output.txt', 'w') as output_file:
# Iterate the map and write to the file each word and its count
for word, count in word_counts.items():
print('Word: {}. Count: {}'.format(*args: word, count))
output_file.write("{} \t {}\n".format(*args: word, count))
# Call the method
problem_2()
Run: question_2 (1)
/Users/rajkumar/Documents/Manoj/2_Academics/UCM/3_Sprin
Word: Python. Count: 1
Word: Course. Count: 2
Word: Deep. Count: 1
Word: Learning. Count: 1
Process finished with exit code 0
problem_2()
Git
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TODO
Python Console
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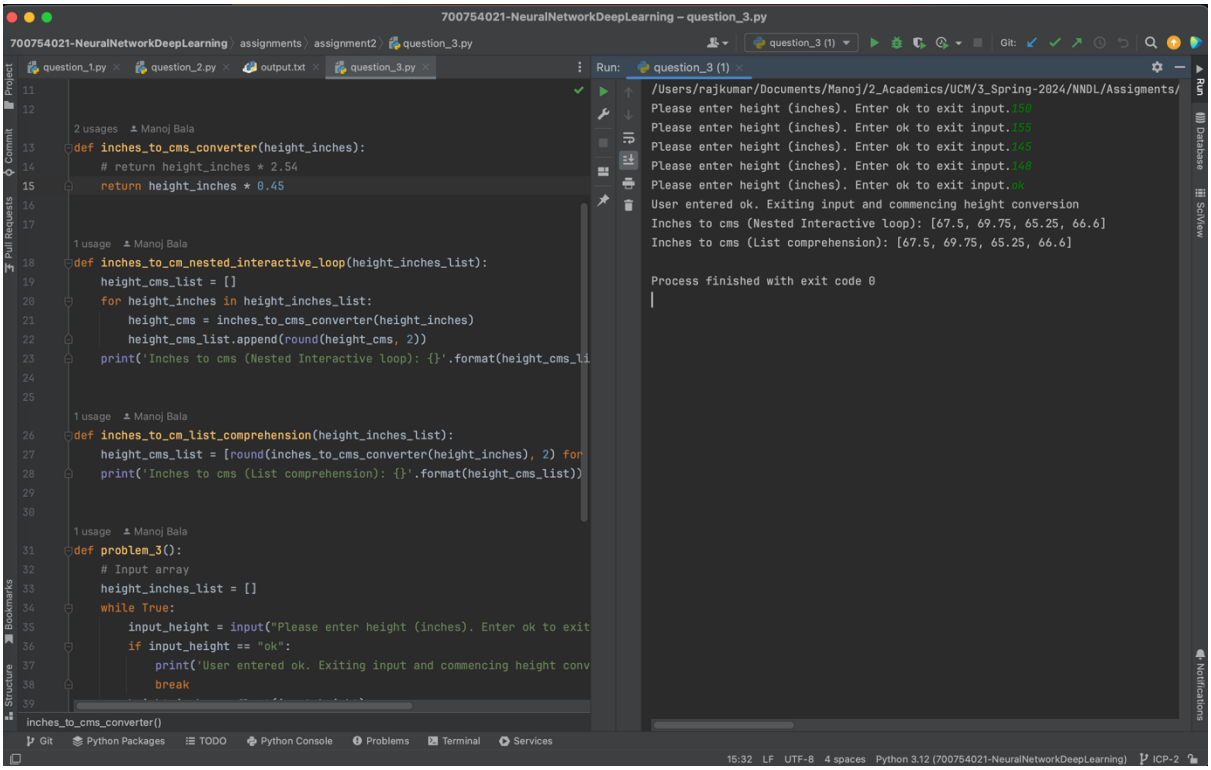
26:1 LF UTF-8 4 spaces Python 3.12 (700754021-NeuralNetworkDeepLearning) ICP-2

3. Question 3


700754021-NeuralNetworkDeepLearning – question_3.py
700754021-NeuralNetworkDeepLearning 〉 assignments 〉 assignment2 〉 question_3.py
question_3 (1)
Git:
question_1.py
question_2.py
output.txt
question_3.py
2 usages Manoj Bala
def inches_to_cms_converter(height_inches):
# return height_inches * 2.54
return height_inches * 0.45
1 usage Manoj Bala
def inches_to_cm_nested_interactive_loop(height_inches_list):
height_cms_list = []
for height_inches in height_inches_list:
height_cms = inches_to_cms_converter(height_inches)
height_cms_list.append(round(height_cms, 2))
print('Inches to cms (Nested Interactive loop): {}'.format(height_cms_li
1 usage Manoj Bala
def inches_to_cm_list_comprehension(height_inches_list):
height_cms_list = [round(inches_to_cms_converter(height_inches), 2) for
print('Inches to cms (List comprehension): {}'.format(height_cms_list))
1 usage Manoj Bala
def problem_3():
# Input array
height_inches_list = []
while True:
input_height = input("Please enter height (inches). Enter ok to exit
if input_height == "ok":
print('User entered ok. Exiting input and commencing height conv
break
inches_to_cms_converter()
Run: question_3 (1)
/Users/rajkumar/Documents/Manoj/2_Academics/UCM/3_Spring-2024/NNDL/Assigments/
Please enter height (inches). Enter ok to exit input.150
Please enter height (inches). Enter ok to exit input.155
Please enter height (inches). Enter ok to exit input.145
Please enter height (inches). Enter ok to exit input.140
Please enter height (inches). Enter ok to exit input.ok
User entered ok. Exiting input and commencing height conversion
Inches to cms (Nested Interactive loop): [67.5, 69.75, 65.25, 66.6]
Inches to cms (List comprehension): [67.5, 69.75, 65.25, 66.6]
Process finished with exit code 0
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15:32 LF UTF-8 4 spaces Python 3.12 (700754021-NeuralNetworkDeepLearning) ICP-2