

Spring 2022: CSEE5590/490 – Special Topics

Python and Deep Learning - ICP-2

Lesson Overview:

This lesson will focus on installation and making one familiar with python programming concepts.

Programming elements:

Python Conditional Statements, Data structure, functions.

Lecture-2:

1. Write a program, which reads heights (inches.) customers into a list and convert these heights to centimeters in a separate list using:
 - 1) Nested interactive loop.
 - 2) [List comprehensions](#)

(Read input from user to check if no more data (Y, N)).

Example: L1: [150,155, 145, 148]

Output: [68.03, 70.3, 65.77, 67.13]

2. Write a program that takes two strings from the user: first_name, last_name. Pass these variables to fullname function that should return the (full name).
 - For example:
 - First_name = “Ahmed”, last_name = “Albishri”
 - Full_name = “Ahmed Albishri”
 - Write function named “string_alternative” that returns every other char in the full_name string.
Str = “**Good evening**”
Output: Go vnn

Note: You need to create a function named “string_alternative” for this program and call it from main function.

3. Write a python program to find the wordcount in a file (input.txt) for each line and then print the output.
 - Finally store the word & counts in an appropriate data structure and write the output from the data structure to an **output.txt** file.

Example:

Input: a file includes two lines:

Python Course

Deep Learning Course

Output:

Python Course

Deep Learning Course

Word_Count:

Python: 1

Course: 2

Deep: 1

Learning: 1

Note: Your program should work for any number of lines.

** Follow the IPC rubric guidelines.

Submission Guidelines:

1. Once finished document your code and make sure all parts if the assignments are completed.
2. Push your code to your GitHub repo and update the ReadMe file, add your info, and partner info.
3. Submit the assignment ICP-2 on Canvas.
4. Present your work to TA during class time to proof the execution and complete submission.

After class submission:

1. Once finished document your code and make sure all parts if the assignments are completed.
2. Push your code to your GitHub repo and update the ReadMe file, add your info, and partner info.
3. Submit the assignment ICP-2 on Canvas before the deadline.
4. Record a short video (1~3) minute, proof of execution and complete assignment.
5. Add video link to ReadMe file.

Note: *Cheating, plagiarism, disruptive behavior and other forms of unacceptable conduct are subject to strong sanctions in accordance with university policy. See detailed description of university policy at the following URL:*
<https://catalog.umkc.edu/special-notice/academic-honesty/>