Python_Lesson1: Basics of Python

Please don't forget to submit your feedback after the class. This helps a lot in increasing effectiveness of the course.

Lesson Overview:
In this lesson, we will focus on installation and making one familiar with python programming concepts.

Use Case Description:
1. Hello World
2. Add two numbers
3. Basic operations
4. Import Turtle Graphics and create the two lines. Also calculate angle between them
5. Basic for loop

Programming elements:
Python Features, Applications, Installation, Python version, Data types, Operators, Conditional Statements

Source Code:
https://umkc.box.com/s/w3ukl1ddz1tlucwppcbjtvfzbf49j1is

In class programming:
Note: Code quality (in terms of time and space complexity) is highly valued
1. State differences between Python 2 and Python 3 version.

2. Write a python program for the following:

   –Input the string "Python" as a list of characters from console, delete at least 2 characters, reverse the resultant string and print it.

> *Sample input:*
>
> •python
>
> •*Sample output:*
>
> •ntyp

   – Take two numbers from user and perform arithmetic operations on them.

3. Write a program that accepts a sentence and replace each occurrence of 'python' with 'pythons' without using regex

> •*Sample input:*
>
> •I love playing with python
>
> •*Sample output:*
>
> •I love playing with pythons

ICP Submission Guidelines (for In Class students):
1. ICP Submission is in pairs of two students.
2. Once completed, must be presented to TA or Instructor before the completion of the class
3. Submission after class is considered as a late submission. (Check the late submission policy in the syllabus)
4. ICP Code with brief explanation should be pushed to GitHub. Submit GitHub link through the Feedback Form.

Online Submission Guidelines (for Online students):
1. Submit your source code and documentation to GitHub and represent the work through wiki page properly (submit your screenshots as well. The screenshot should have both the code and the output)
2. Comment your code appropriately
3. Video Submission (2 – 3 min video showing the demo of the ICP, with brief voice over on the code explanation)
4. Submission after class is considered as a late submission. (Check the late submission policy in the syllabus)
5. Use the following Google link to submit your ICP # (GitHub wiki page link for ICP #):

Evaluation Criteria:
1. Completeness of Features
2. Code Quality (https://en.wikipedia.org/wiki/Best_coding_practices)
3. Time
4. Feedback Submission

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-notices/academic-honesty/*