COP 2930 Final Exam Review

Date: 12/8/2020 (Tuesday)
Time: 10:00 am - 12:50 pm
Location: At your house, online

Exam Administration
Part A - 10 am - 10:50 am, late due 11 am
Part B - 10:50 am - 11:40 am, late due 11:50 am
Part C - 11:40 am - 12:40 pm, late due 12:50 pm

I strongly suggest that you type your answers and do NOT scan.

I strongly suggest that you start submitting at the earlier due time listed. The way Webcourses works, the beginning of the minute is not accepted. (Don't cut it close, I don't have time to administer a make up like last time.)

Accepted File Types: doc, docx, txt, pdf

I will post both the docx and pdf versions of the questions.

Part A - Beginning third of the course
Printing
Input
Variables
Arithmetic Expressions
If Statement
Loops - For, While

For your class, I'll do about half conceptual questions and half coding questions

Part B - Functions and Turtle
Only dealing with functions that take in simple parameters, no lists.

Knowing which variables are valid to use in a function
Knowing how to call a function that returns a value.
Knowing how to call a function that is void (returns no value)
Understanding that as soon as you hit the return statement, no further
work gets done in the function.
How functions "talk" to each other.
How to integrate a function into a program after you've tested it.
How to test a function.
*A python function can return two things, but this won't be tested.

Won't be all code, could be some conceptual questions, could be some
testing questions and then some code you fill in for functions.

Turtle

During the exam you may go online to look for the turtle documentation
or course notes.

Functions you should know how to use:

forward
backward
right
left
setpos
penup
pendown
begin_fill
end_fill
color
pencolor
fillcolor

Part C - Lists, Strings, Dictionaries, Files

Know how to add (append) something to a list.
Know how to do both positive and negative indexing.
Know how to slice a list.
Know how to check if something is in a list.
Know how to loop through a list using the iterator.
Know how to loop through a list using the index.

Same for strings…

Know how to create a dictionary.
Know how to check if a key is in the dictionary or not.
Know how to add or change a key,value pairing.
Think of some useful cases to use a dictionary.

For files, know how to open a file to read from.
Know now to read the file, line by line.
Know how to split a line into different tokens.
Know how to open a file to write to and write to it.
Make sure you close your files after you are done using them.

I might give you a problem where I give you a big input file and you have to write a short program to reveal some answer and then on the test you just put that answer, but the only way to get it is to write the program which reads form the file. It would take too long to do it by hand!!! You CAN edit my posted programs on files to do this.