CSC 119 – Introduction to Programming: Python

TOPIC 6

TOPIC 6 – ASSIGNMENT #5 – 60 Points

- **Design** the program using XMind or another design tool (30 points). No .rar files please!
- **Code** the following program (30 points)

DIRECTIONS:

Create a design and code for ALL of the functions below. **Then** *combine them into one program* **with a main driver; comments and a menu that will call and execute each of the functions (Refer to the Example Program).**

Document, with comments, each of the functions you created.

Each function should include a detailed design and Python code as we you have done in the past.

FUNCTIONS:

1. Write a function that takes **5 int arguments and returns** the largest of the 5.
2. Write a Python program to perform the task of temperature conversion from Celsius to Fahrenheit. Note that given C as the degree of temperature in Celsius, the corresponding degree F in Fahrenheit equals $1.8*C + 32.0$. For example 50 degree Celsius should be 122 degree Fahrenheit.
3. Continually prompt the user for an integer. Constrain the user's input to integers between 1 and 50,000. You can assume that the user will enter an integer and not a string or floating point number. Make sure you have a way of exiting the function.
4. Write a function that calculates that computes the balance of a bank account with a given initial balance and interest rate, after a given number of years. Assume interest is compounded yearly.

NOTE: You may upload your design without zipping the file; however, the code must be zipped before you upload it.

Don’t forget to refer to the Grading Rubric on the main page of the D2L site.