**Additional information & Answer Sheet for Laboratory Assignment #3**

**(100 points)**

**Turn in this sheet and ALL code via Blackboard (Lab 3).**

**Step 2:**

1. First compile and execute the program.
2. (20 pts) The program and the output are almost unreadable because of the bad formatting. Reformat the program and the output to make them clear and readable. Please look at the **Coding** **Style Guide** on CS 2400 site on GitHub. Also, your program must have introductory comments (header block with your name, lab # etc.) at the top.
3. (10 pts) Save your final version and submit on Blackboard.

**Step 3:**

1. (5 pts.) prog2.cc has a compilation error(s). What line(s) of the file does the compilation error(s) occur at? Lines 12, 13, & 14

2. (5 pts.) What does the error message(s) say?

**error: use of undeclared identifier 'endl'; did you mean 'std::endl'?**

this occurs because of an improperly/non-declared namespace

3. (5 pts.) Explain how you fixed the error(s).

adding “using namespace std;”  
or adding std:: in front of each cout & endl and other features from the standard library

4. (5 pts.) prog3.cc has compilation errors. What lines of the file does the compilation error occur at? Lines 17 & 19

5. (5 pts.) What does the error messages say?

**error: use of undeclared identifier 'Num2'; did you mean 'num2'?**

**error: expected ';' after expression**

6. (5 pts.) Explain how you fixed the errors.

Fixing erroneous capitalization of num2 on line 17

Adding missing semicolon on line 19

**Step 4:**

7. (5 pts.) What is the output from running the ./a.out from prog4.cc with the given data?

 ./a.out

10

10 times 2 = 20

3

3 times 2 = 6

8

8 times 2 = 16

8. (5 pts.) Write down the output from prog4.out

more prog4.out

2 times 2 = 4

4 times 2 = 8

6 times 2 = 12

8 times 2 = 16

10 times 2 = 20

**Step 5**: Compile and execute prog5.cc and answer the following questions.

1. (5 pts.) What is the output of this program?
2. 20 degrees Celsius in Fahrenheit is 52
3. 56 degrees Fahrenheit in Celsius is 0
4. (5 pts.) Do the calculation **manually** and compare with the output from the program. Explain what is happening.

20C = 68F

56F = 13.3C

1. (5 pts.) Correct the code as the programmer intended.
2. (5 pts.) Include the necessary statements to format the output to **one decimal** place.
3. (5 pts.) Include the header documentation (your name, lab#, introduction to the program etc.).
4. (5 pts.) Save your final version of this program and upload it to Blackboard.

**BE SURE TO SUBMIT ALL THE PROGRAMS YOU MODIFIED ON BLACKBOARD UNDER LAB3.**