**COP2220**
**Project 1 – Unit Conversion Tool**
**100 Points**

**Submission Requirements**

- Submit your project folder via the FileUploader tool provided on the website
    - Follow the project submission guidelines for the class

**Design Documentation Requirements**

Note: Create a "Design Documents" folder in the project folder to store the design documents.

- Flowchart of the main() function
- Pseudocode of the main() function

**Design Specification Requirements**

Note: Refer to the sample output in the Example Output section below.

1. Display your name and the project title on separate lines, followed by a blank line
2. Prompt the user for 3 integer numbers (i.e., 0, 1, 2, …)
    A. A temperature in Fahrenheit degrees
    B. A distance in feet
    C. A weight in pounds
    Note: Display each prompt on a separate line
3. After displaying each prompt, read the user's input
    A. The input values should appear to the right of their respective prompts
    B. Store the input values in separate variables of the appropriate type (integer)
4. Perform the required conversions using the provided equations
    A. Fahrenheit to Celsius C = (F – 32) * 5 / 9
    B. Feet to meters M = F * 0.3048
    C. Pounds to kilograms K = P * 0.4536
    D. Store the converted values in separate variables of the appropriate type (double)
5. Display the program output
    A. Display a blank line after the last input prompt
    B. Display the results using the sample output in the Example Output section as a guide
        1. Use a width of 15 characters for each column of the output
        2. Display converted values to three decimal places

**Additional Notes**

- Use only one variable for each value (there are 6 variables in this project)
- Define constants for the decimal values used in the Feet and Pounds conversion equations
- Define constants for the format strings used to display the report's header and rows
- Assume the user enters valid data (don't worry about verifying the input values for errors)
- Do not use functions (all statements must be located in the main() function)
- Ensure your source code conforms to the commenting standards for the class

**Example Output**

```
Ima C Student
Project 1 – Unit Conversion Tool

Enter a Fahrenheit temperature (integer): 212
Enter a distance in feet (integer): 5280
Enter a weight in pounds (integer): 200

       Original          Value   Converted to          Value
       --------          -----   ------------          -----
     Fahrenheit            212        Celsius        100.000
           Feet           5280         Meters       1609.344
         Pounds            200      Kilograms         90.720
```