CSCI 14 Programming Assignment #1 (20 points). Due 2/4/21

Write a C++ program to convert a distance given in miles plus additional feet into kilometers. Use the following values (please, **exactly** these values – they're not exactly correct but I want your results to exactly match my results) to convert the distances: one mile is 5280 feet, one meter is 3.28 feet (this isn't exactly correct but don't worry about it), and one kilometer is 1000 meters.

Your program will prompt for miles and feet. The value for miles must be an integer (enforce this in the code), but allow a fractional part on the feet. The program will then calculate the equivalent distance in kilometers, and then display both the entered values and the result, labeled reasonably. Show any fractional part in the results.

An example run of my program:

```
Enter miles : 2
Enter feet : 0.5
2 miles and 0.5 feet is 3.21966 kilometers.
```

You may assume the user will enter reasonable values (relatively small nonnegative numbers) for miles and feet, but do not allow miles to have a fractional part. I don't care if your prompts or output look exactly like mine, just that you are reasonable in your screen layout. However, your numbers (values shown in the results) should exactly match mine.

Design the program (work out the steps needed) using pseudocode (or a flowchart) before you write the code. Your program should be properly formatted and well documented. The notes at the top of the program need to include the filename of your C++ program, your name, the date you wrote the code, the assignment number (why you wrote the program), and a short description of the problem solved by the program.

When you are sure your program works, test it with a wide range of values, saving the test runs by using the DOS shell mark/copy to capture the text and put it into a text file such as would be created by Notepad. Put a blank line or two between each run. Otherwise, DO NOT EDIT the output AT ALL.

Turn in your source file and test runs showing all of the following test values, and a few more:

0 miles, 5280 feet
1 mile, 0 feet
2 miles, 0.5 feet
0 miles, 0 feet
0 miles, 3280 feet
0 miles, 3281 feet
0 miles, 3281.54 feet
0 miles, 3282 feet
10 miles, 0 feet
0 miles, 52800 feet