CS 121 – Homework #1 – "Time Zones" – Due Thursday, January 31, 2019

In this assignment you will write a Python program that asks the user to enter the current time in Greenville, and then prints the simultaneous times in Honolulu and Adelaide. The purpose of this assignment is to practice if and if/else statements. The program also features simple I/O and performs some straightforward numerical calculations.

Guidelines:

1. Each program that you submit for homework must be appropriately documented. There should be a comment at the beginning of the program giving the name of the program, your name, the date, and the purpose of the program. Additional comments should highlight your thought process in the algorithm.

2. When you ask for the time in Greenville, you should do so in three stages. Ask for the hour, the minute and whether it is am or pm. This will make the input procedure easier than trying to parse a string such as "12:15 pm". You may assume that the user will enter legitimate input.

3. Assume that the time in Honolulu is 5 hours behind Greenville, and that the time in Adelaide is 15½ hours ahead of Greenville.

4. Be sure to format your output as shown in the examples below. Print a blank line between the input prompts and the output. When you print the times in the two cities, note that the time in Honolulu may refer to the previous day, and the time in Adelaide may refer to the next day. Therefore, the program should print the words "yesterday" or "tomorrow" as appropriate. Please do not print the word "today" if the time you are printing is on the same day.

5. Note that in some cases, you will need to tell your program to print an extra zero in the output. For example, if the time is 4 minutes after 12, then you should print 12:04, not 12:4.

Two example executions:

```
************************************************
*       Welcome to the Time Zone Program       *
************************************************

What time is it in Greenville?
Please enter the hour (1-12):   4
Please enter minute (00-59):   20
Enter 'a' for am or 'p' for pm:   a

The time in Honolulu is 11:20 pm yesterday.
The time in Adelaide is 7:50 pm.
```

```
**************************************************
*        Welcome to the Time Zone Program        *
**************************************************

What time is it in Greenville?
Please enter the hour (1-12):  7
Please enter minute (00-59):  15
Enter 'a' for am or 'p' for pm:  p

The time in Honolulu is 2:15 pm.
The time in Adelaide is 10:45 am tomorrow.
```