Assignment 3 – Due 2/24/2016, Midnight

1. Setup GPIO on your Pi (using the Pi cobbler as I have shown in the document "Using Pi Cobbler - GPIO test with blinking LED", Week 3, on Blackboard or directly connecting to the Pi's pins). Set up the blinking LED as I showed.
(a) Create a document showing your wiring diagrams, your python code, and a single picture of your set up showing the LED wiring. Post this **document in pdf format** in the **misc** folder of your github repo.
(b) Modify the python code to make the LED blink three times rapidly followed by a pause of five seconds, followed by four rapid blinks, another pause and repeating the whole thing again in a loop till you terminate the python script. Post your python code in code/ directory, with the file name myBlinkingLed.py.

2. In this exercise, you will modify the posted python programs. It will give you practice with using python to write data to sqlite databases.

Write a python function readTime() that returns a list of the form [xdate, xtime] that has current date in xdate, and current time in xtime. The string for xdate has the form 'Year-Month-Day' (like 2016-02-16) and the time string xtime has the form 'Hour-minute-second' as in '17-10-49' . We are using a 24-hour clock. You **don't** need to show me readTime() function. Just make sure it works as expected.

Now modify the readTime() function, call it logTime(), to log the same date and time strings to a sqlite database. Create a **testTime.db** database file with two text columns to hold these values.
Every time you call the python function logTime(), the current date and time should be logged to the db file.
Put the logTime() function in a python script file logTime.py and post it in the code/ folder of your github repo. Make sure you provide ample comments at the top of your files.