Automatic Lighting System with LED displaying temperature and Humidity

Testing Procedure

1. Testing Components:

- Testing PIR: Using Serial Monitor receiving reading when high and low.
- Testing LDR: Using Serial Monitor receiving values at different brightness levels.
- Testing Bulb: Sending high and low signals to the bulb and checking whether it's working.
- Testing LCD: Sending different keywords and positioning them at different places to check whether all pixels are working properly.

2. Integration testing:

- The PIR + The bulb: Receiving signals from the PIR and hence checking if the Bulb is switching on when there is a movement of a living being.
- The LDR + The Bulb: Receiving signals from the LDR and seeing whether for a certain range of brightness the switches Off and for other it is On.
- The PIR + The LDR + The Bulb: Receiving signals from the LDR and the PIR and checking that at a certain level of brightness when there is a movement the bulb switches on otherwise it doesn't.
- The LCD + The Code: Checking whether it displays date and time correctly.
- The Whole Setup : Checking the whole setup when there is a movement then at a certain brightness level the Bulb switches on and the LCD displays date and time for a certain amount of time.

- Gaurav Singh Chandrabhan
