## Lab Report 1(b):

To write this report, you can use proteus or hardware instruments taken from the lab (remember, if you take hardware instruments from the lab, then return it on the same day, otherwise the lab won't give you the instruments, may blacklist you. Room no. 507 is free for students to conduct experiments). If you use proteus, take screenshots of the circuits you prepared in the proteus and use it in the lab report. If you use hardwares from the lab, then take a clear picture of the overall circuit and then use it in your lab report.

Finally, you must submit the codes of each problem in the lab report. Check Lab reports samples/guidelines document to properly write your lab report. Maintain the formatting of the lab report as mentioned in the documents.

## The tasks for lab report 1(b):

- 1. Display the Gas Sensor data you measured using MQ-2 sensor on the OLED like this:
  - "Gas sensor data: ppm value".
- 2. Turn on a buzzer if your gas sensor detects ppm above a certain threshold using Arduino.
- 3. Setup a gas sensing system so that if it detects gas, a message "Gas is detected" is shown on the OLED screen.
- 4. A gas sensing based system should be implemented such that if gas is detected, an alarm/buzzer is triggered instantly to notify the incident.
- 5. A gas sensing based system should be implemented such that if gas is detected, a motorized exhaust fan is triggered to keep out the fumes.