

Computer Organization
Assigned: Sunday 14/11/2021
Due: Sunday 21/11/2021

# **Arduino Assignment 4**

# **Temperature warning system**

- Use the LM35 to measure the current air temperature and print the readings in Centigrade (°C) on the serial monitor.
- Use the IR receiver (IR1383) to set a temperature threshold using your remote control. You should assume that the user will enter any number of digits and then click the "OK button" to set the threshold.
- If the temperature exceeds this threshold), a buzzer and an LED must turn ON. If it drops below (threshold -1) then the LED and buzzer should stop.

#### **NOTE:**

- In order for you to increase the surrounding temperature use any heating device that doesn't use flames. (Hairdresser for example or any similar device).
- The video should clearly show the reading on the serial monitor as well as the warning buzzer and LED turning ON when a certain temperature is exceeded, also it should include your steps for setting the threshold.
- In order to read the value of each remote control button you have to use an external library: <a href="https://github.com/z3t0/Arduino-IRremote">https://github.com/z3t0/Arduino-IRremote</a>
- Please read the library documentation and how to use it since there will be a collision with the RobotIRremote library that comes already with the arduino software. One approach is to delete the RobotIRremote, the other is to simply rename the downloaded library files and includes to another name.

### **Delivery Policy**

- Same groups
- Represent the requirements using components (LM35, buzzer, IR receiver, etc....) and code.
- Each group must submit a recorded video along with a report containing the code
- Due Date: Sunday 21/11/2021 @ 13:59
- Late delivery = -25% for each day of delay.

# **Good Luck**