

Embedded Systems Lab

Assignment 6

1. Create an Arduino program for keypad with 8 wire connection. Take the input from keypad for the angle of servo rotation.
2. Create an Arduino program keypad with 1 wire connection. Take the input from the keypad and print it on the serial monitor.
3. Create an Arduino program for lcd and temperature sensor. If the temperature of surrounding is greater than 40 degrees, the LCD should print rolling information "<temp. value> -Very High" from right to left. If less than 40 degrees, it should display "<temp. value> -Moderate to Low" scrolling from left to right. (Example:- 38° - Moderate to Low)
4. Create an Arduino program for displaying different values sensed by the embedded system. User should enter the choice from the keypad and corresponding parameter and value should be displayed on LCD. Displayed value should be <parameter>: <value>, for example Temperature: 38°. Following selections should be enabled for the user:
 - a. On selection of A, surrounding temperature must be displayed.
 - b. On selection of B, surrounding light intensity must be displayed.
 - c. On selection of C, gas intensity in surrounding environment must be displayed.