Managing Linux Systems from the Embedded Perspective: Ex 3

Part 1

In this exercise we will take button input and toggle an LED

You will need the following:

a. 1 x LED

b. 1 x tactile switch

c. 1 x Resistor (Pull-up or down for your button)

d. 1 x Breadboard (Available in the PSoC Programmer kit from the Library)

e. Some cable to connect to the Pi

You should write a simple C program that toggles an LED connected to the pin of the Raspberry Pi when the button is pressed.

Part 2

In this exercise we will choose a sensor that will take a measurement when a button is pressed and displays the sensor reading to your LCD screen

You will need the following:

a. 1 x LCD screen

b. 1 x potentiometer (To control screen contrast)

c. Cables for making connections

d. 1 x tactile switch

e. 1 x Resistor (Pull-up or down for your button)

f. 1 x Breadboard (Available in the PSoC Programmer kit from the Library)

We will now write C code to update the sensor value on the LCD screen. The c program should be running in an infinite loop and react to any button press.

Save your applications and demonstrate them by 8.2.2019 to get full points