

CSE 101 ASSIGNMENT #2

DUE: JAN 3rd 23:50 2024

MUST BE SUBMITTED TO CLASS ONLINE MOODLE PAGE

ASSIGNMENT:

In this assignment you are required to write a C program on your computer that talks to Arduino in C language. To do that you need to:

- a) Write a code in C language on your pc to talk to arduino
- b) Write arduino code on arduino to talk to pc

Your program on PC will have a menu as follows:

```
## WELCOME TO GTU ARDUINO LAB          ##
## STUDENT NAME: ÖMER ÖZTÜRK          ##
## PLEASE SELECT FROM THE FOLLOWING    ##
## MENU :                             ##
(1) TURN ON LED ON ARDUINO
(2) TURN OFF LED ON ARDUINO
(3) FLASH ARDUINO LED 5 TIMES
(4) SEND A NUMBER TO ARDUINO TO COMPUTE FACTORIAL BY ARDUINO
(5) Button press counter (bonus item)
(6) Turn on external led (bonus item)
(0) EXIT
PLEASE SELECT:
```

Your program on arduino should not have any menu for user.

Hint: You may use the information at

<https://forum.arduino.cc/index.php?topic=306198.0>

<https://todbot.com/blog/2013/04/29/arduino-serial-updated/>

Or many other resources available on internet

(5) button press counter is a bonus question, requires hardware button connection to an input port. At each press of a button, number sent on computer screen will be incremented by one and factorial will also be displayed. We want to see if your program is capable of taking button pushes, that's all.