Lab Assignment 7  

Equipment used: AVR Butterfly
To be programmed in: C

EXPERIMENT 1  Independent Tasks

Write a C program to implement the following tasks:
- Task 1  Should count the number of times that the joystick has been pressed in the following way: right = +1, left = -1, center push = set to zero.
  Display the count on LCD position 0+1.
- Task 2  Should continuously read the brightness sensor and display its value as 2 numeric digits on LCD position 4+5.

EXPERIMENT 2  Interactive Multi-Tasking

Write a C program to implement the following tasks:
- Task 1  Should count the number of times that the joystick has been pressed in the following way: right = +1, left = -1, center push = send data to Task 2.
  Display the count on LCD position 0+1.
- Task 2: Should continuously receive data from Task 1, and build the running average over the last 3 numbers received.
  Display the result on LCD position 4+5.