



Assignment - ⁰⁷~~05~~ ~~06~~

myCOMPANION 43304

* Problem Statement → Develop an app for a rolling display program of news on computer display. The input strings are supplied by the mobile phone / another computer connected through the wireless network.

* Theory →

A. LCD:

Liquid Crystal Display allows you to control LCD displays.

B. Hardware Required:

- ① Arduino Board
- ② LCD Screen
- ③ Resistor
- ④ Wires

C. Circuit Connection:

- ① The pin [LED+] of the LCD screen is connected to Vcc via a small-value resistor.
- ② Pin 3 [V_{EE}] is connected to the variable terminal of a pot while the fixed terminals of the pots are connected to ground and Vcc.
- ③ The R/W pin is connected to ground because arduino will only write data to LCD module.
- ④ The RS, EN, DB4, DB5, DB6, DB7 pins of the LCD are connected to pins 13, 11, 9, 6, 5 and 4 of arduino respectively.

D. Methods:

- ① `scrollingDisplayLeft()`, `scrollingDisplayRight()`:
Methods to reverse the direction of text flow.

E. Advantages of LCD:

- ① Does not get affected by the presence of magnetic field.
- ② Due to low power consumption, very less heat emitted during operations.



F. Disadvantages of LCD:

① loss of contrast in high temperature environments.

G. Applications of LCD:

Digital wrist watches, digital cameras, cockpit displays, etc.

* Conclusion → Thus in this assignment, we've learnt about LCDs and implemented a rolling display strings program.