ADAFRUIT INNOVATION LAB

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LIQUID CRYSTAL DISPLAY

LIBRARY:-

#include<LiquidCrystal.h>

FUNCTIONS:-

Here are list of all functions defined to used liquid crystal display with Arduino.

1. **LIquidCrystal():-** This function is used to defined the pins connection of LCD to Arduino. A object will be used to access all the functions of this library.
   syntax:- LiquidCrystal *objectName*(*rsPin, enablePin, D0, D1, D2, D3, D4, D5, D6, D7, D8*);
   eg:- LiquidCrystal lcd(2, 3, 4, 5, 6, 7, 8, 9, 10, 11);

2. **LiquidCrystal():-** This function is same as above function but used half data pins D0-D3.
   syntax:- LiquidCrystal *objectName*(*rsPin, enablePin, D0, D1, D2, D3*);
   eg:- LiquidCrystal lcd(2, 3, 7, 8, 9, 10);

3. **begin():-** This function is used to initialize the LCD.
   syntax:- *objectName.*begin(*column, row*);
   eg:- for 16x2 LCD => lcd.begin(16, 2);
   for 16x4 LCD => lcd.begin(16, 4);

4. **clear():-** This function clears the entire display and set the cursor to (0,0) position.
   syntax:- *objectName.*clear();
   eg:- lcd.clear();

5. **home():-** This function set the cursor to (0,0) position without clearing the display.
   syntax:- *objectName.*home();
   eg:- lcd.home();

6. **noDisplay():-** This function turns off the display very quickly.
   syntax:-*objectName.*noDisplay();
   eg:- lcd.noDisplay();

7. **display():-** This function turn ON the display very quickly.
   syntax:- *objectName.*display();
   eg:- lcd.display();

8. **noBlink() / blink() :-** This function turn Off / turn ON the blinking of cursor.
   syntax:- *objectName.*noBlink();
   *objectName.*blink();
   eg:- lcd.noBlink();
   lcd.blink();

9. **noCursor() / cursor() :-** This function turn OFF /turn ON the cursor display underline.
   syntax:- *objectName.*noCursor();
   *objectName.*cursor();
   eg:- lcd.noCursor();
   lcd.cursor();

10. **setCursor():-** This function is used to place the cursor at suitable position(x,y).
    syntax:- *objectName.*setCursor(*column, row);*
    eg:- lcd.setCursor(8,1);
    Note:- home position is (0,0) so 16x2 means (0-15, 0-1).

11. **write():-** This function is used to write the characters on lcd display.
    syntax:- *objectName.*write("*16 bit or less*");
    eg:- lcd.write("Hello World !");

12. **leftToRight():-** This will flow the characters from left to right.
    syntax:- *objectName.*leftToRight();
    eg:- lcd.leftToRight();

13. **rightToLeft():-** This will flow the characters from right to left.
    syntax:- *objectName.*rightToLeft();
    eg:- lcd.rightToLeft();

These are various function which are used to interface LCD with Arduino. These are all functions which are present in library.