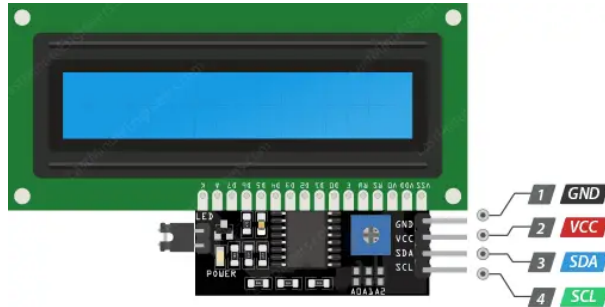# Principles

- A typical I2C LCD display consists of an HD44780-based character LCD display and an I2C LCD adapter.
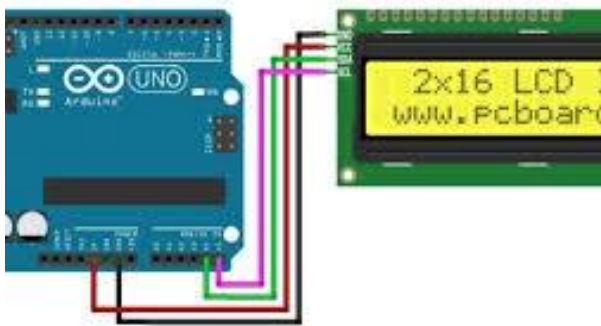
Hardware

Module

Schematic

- A4 -> SDA
- A5 -> SCL

Software

Library

- https://github.com/johnrickman/LiquidCrystal_I2C

Code

```
LiquidCrystal_I2C lcd(0x27, 16, 2);

void setup() {
  lcd.init();
  // turn on the backlight
  lcd.backlight();
}

void loop() {
  //wait for a second
  delay(1000);
  // tell the screen to write on the top row
  lcd.setCursor(0,0);
  // tell the screen to write "hello, from" on the top row
  lcd.print("Hello, From");
  // tell the screen to write on the bottom row
  lcd.setCursor(0,1);
  // tell the screen to write "Arduino_uno_guy" on the bottom row
  // you can change whats in the quotes to be what you want it to be!
  lcd.print("NKU");
}
```

Links

- In-Depth: Interfacing an I2C LCD with Arduino