

Digital Force and Weight Measurement System

Arduino Code:

```
#include <HX711_ADC.h>
#include <LiquidCrystal.h>
// HX711 pins
#define DT 3
#define SCK 2
HX711_ADC LoadCell(DT, SCK);
// LCD(rs, en, d4, d5, d6, d7)
LiquidCrystal lcd(7, 6, 5, 4, 9, 8);
void setup() {
  Serial.begin(9600);
  // LCD init
  lcd.begin(16, 2);
  lcd.clear();
  lcd.print("Initializing...");
  // HX711 init
  LoadCell.begin();

  delay(500);
  // Start and tare load cell

  LoadCell.start(2000); // wait for stabilization

  LoadCell.setCalFactor(1.0); // temporary calibration

  lcd.clear();

  lcd.print("Ready");

  delay(1000);
}

void loop() {

  LoadCell.update();

  float force = LoadCell.getData(); // raw value
  lcd.setCursor(0, 0);

  lcd.print("Force: ");
  lcd.print(force, 2); // show 2 decimals
```

```
lcd.print(" N ");  
delay(200);  
}
```