

```

//-----Title-----
/*
  File: adc2.ino
  Started: 11/7/13
  Program Description: Reads an analog sensor
  (potentiometer) on pin A0, converts it to voltage
  (0-5V), and displays the result on an LCD.
*/
//-----Initializations-----

// Include the library code.
#include <LiquidCrystal.h>
// Initialize the library with the numbers of the
// UNO interface pins.
// Syntax: LiquidCrystal(rs, enable, d4, d5, d6, d7)
LiquidCrystal lcd(12, 11, 5, 4, 3, 2);

int sensorPin = A0; // Select the input pin for the
                    // potentiometer.
int sensorValue = 0; // Declare int variable name to
                    // store the sensor reading.
float voltage = 0; // Declare float variable name to
                  // store the voltage.

void setup(){
  // Set up the LCD's number of columns and rows.
  // Syntax: lcd.begin(cols, rows)
  lcd.begin(16, 2);
}
// -----Main Code-----

// The loop routine runs over and over again forever:
void loop() {
  // Read the analog input on analog pin 0:
  sensorValue = analogRead(A0);
  // Convert the analog reading (which goes from 0-1023)
  // to a voltage (0-5V):
  voltage = sensorValue * (5.0 / 1023.0);
}

```

```
// Display voltage value to 2 decimal places on LCD:  
lcd.print(voltage,2);  
// Wait 200 ms.  
delay(200);  
// Clear the LCD screen.  
lcd.clear();  
}
```