

Data Acquisition

Analogue Read

ID: 4715

Name: Ibrahim Mostafa Ibrahim Elshenhapy

Group: 3

Section: 1

Arduino code

```
#include<LiquidCrystal.h>
```

```
LiquidCrystal lcd(12,11,10,9,8,7);
```

```
int sensor=A5,pot=A1,ldr=A2;
```

```
float temp;
```

```
void setup() {lcd.begin(16,2);}
```

```
void loop() {lcd.clear();
```

```
lcd.setCursor(0,0);lcd.print("Temp=");
```

```
lcd.setCursor(6,0);lcd.print((analogRead(sensor)-5)/2.0);
```

```
//Different formula but it works for my simulation
```

```
//I think there is error in my protus version
```

```
lcd.setCursor(0,1);lcd.print("Pot=");
```

```
lcd.setCursor(4,1);lcd.print(analogRead(pot)*100.0/1023.0);
```

```
lcd.setCursor(8,1);lcd.print("LDR=");
```

```
lcd.setCursor(12,1);lcd.print(analogRead(ldr)*100.0/1023.0);
```

```
//this one worked when i changed the the values of ldr
```

```
delay(500);}
```

```

potter
#include<LiquidCrystal.h>
LiquidCrystal lcd(12,11,10,9,8,7);

int sensor=A5,pot=A1,ldr=A2;
float temp;

void setup() {lcd.begin(16,2);}

void loop() {lcd.clear();

lcd.setCursor(0,0);lcd.print("Temp=");
lcd.setCursor(6,0);lcd.print((analogRead(sensor)-5)/2.0);
//Different formula but it works for my simulation
//I think there is error in my potbus version

lcd.setCursor(0,1);lcd.print("Pwr=");
lcd.setCursor(4,1);lcd.print(analogRead(pot)*100.0/1023.0);

lcd.setCursor(8,1);lcd.print("LDR=");
lcd.setCursor(12,1);lcd.print(analogRead(ldr)*100.0/1023.0);
//this one worked when i changed the the values of ldr
delay(500);}

```

Code Name:
 Sketch uses 3054 bytes (12%) of program storage space. Maximum is 32256 bytes.
 Global variables use 73 bytes (1%) of dynamic memory, leaving 1979 bytes for local variables. Maximum is 2048 bytes.



