LAMPIRAN 1

Listing Program Arduino Nano

```
#include "HX711.h"
HX711 scale(3, 4);
////////////////////////////////////////////////
#include <Wire.h>
#include <LiquidCrystal_PCF8574.h>
LiquidCrystal_PCF8574 lcd(0x27);
////////////////////// keypad ////////////////////
#include <Keypad.h>
const byte rows = 4;
const byte cols = 4;

char keys[rows][cols] = {
  {'D','C','B','A'},
  {'=','9','6','3'},
  {'0','8','5','2'},
  {'+','7','4','1'}
};
byte rowPins[rows] = {5, 6, 7, 8};
byte colPins[cols] = {9, 10, 11, 12};
Keypad keypad = Keypad(makeKeymap(keys),rowPins, colPins,rows,
cols);

long longSA=0,longSB=0;
int axSA=0,axSB=0;

long SH,OKE;
long set1, set2, set3, set4, set5, set6;
String angka,angka2;
int k1=0,k2,k3,k4,k5,k6,k7,k8,k9,k10;

int sensorValue;
long data1 = 0;
long data2 = 0;
long second = 0;
long total, totalbawon, jumlahorang, bagianbawon, totalbersih,
zakat1, zakat2 ;
void setup() {
  // put your setup code here, to run once:
Serial.begin(9600);
```

```
  lcd.begin(16, 2);
   lcd.setBacklight(255);
  lcd.clear();
Serial.println("HX711 Demo");

  scale.set_scale(2530.f);
  scale.tare();
delay(1000);

  lcd.setCursor(1, 0);
  lcd.print("SAMSUL HIDAYAT");
  lcd.setCursor(4, 1);
  lcd.print("15520352");
  delay(3000);
  lcd.clear();

}

void loop() {
  // put your main code here, to run repeatedly:

if(k1==0){
  lcd.setCursor(4,0);
  lcd.print("SCAN");
  lcd.setCursor(3,1);
  lcd.print("DATA BERAT");
  delay(2000);
  lcd.clear();

 k1=1;
  }

if(k1==1){
menu1();}

if(k2==1){
   lcd.setCursor(0,0);
   lcd.print("HSL PENJUMLAHAN");
   lcd.setCursor(0,1);
   lcd.print(total);

  delay(500);
  lcd.clear();
  k3=0;
```

```
 char key0=keypad.getKey();
if (key0=='=')
{   lcd.clear();
    lcd.setCursor(0,0);
    lcd.print("PKRJA= ");
  k3=1;
  }

}

while(k4==0 && k3==1)
{
  char keySA =keypad.getKey();
 if (keySA){if(keySA!='+'||keySA!='='){

                                  angka = keySA;
                                   axSA = angka.toInt();
                                   longSA=(longSA*10)+axSA;
                                SH=longSA/10;
                                   lcd.print(axSA);
                                  }
if (keySA=='='){ lcd.clear();

                jumlahorang=SH;
                 k4=1;
                }

if
(keySA=='+'){axSA=0;longSA=0;SH=0;lcd.clear();lcd.print("PKRJA=
");}

           }
}

while (k5==0 && k4==1){
  lcd.setCursor(0,0);
  lcd.print("    PROSES    ");
  lcd.setCursor(0,1);
  lcd.print(" PERHITUNGAN  ");

 char key0=keypad.getKey();
if (key0=='='){
  lcd.clear();
  lcd.setCursor(0,0);
```

```
  lcd.print("    HASIL     ");
  lcd.setCursor(0,1);
  lcd.print(" PERHITUNGAN  ");
  k5=1;}}

while(k5==1){menu3();}

}

void menu1()
{

  char customKey =keypad.getKey();

  switch( customKey )
  {
   case 'D':
    data1=scale.get_units(10)*102,0;
    lcd.setCursor(0,0);
    lcd.print(data1);
     break;

  case '+':
     data1= (total != 0 ? total : data1);
    //lcd.setCursor(4,0);
     lcd.print("+");
    second = SecondNumber(); // get the collected the second
number
    total = data1 + second;
    lcd.setCursor(0,1);
    lcd.print(total);
    data1 = 0, second = 0; // reset values back to zero for next
use
    break;

case 'B':
    lcd.setCursor(0,0);
    lcd.print("                ");
    lcd.setCursor(0,1);
    lcd.print("                ");
    delay(100);
    lcd.setCursor(0,0);
    lcd.print(total);
    break;
```

```
   case 'C':
  lcd.clear();
     k2=1;
    break;
  }

}

long SecondNumber()
{
  while( 1 )
  {
  char customKey =keypad.getKey();
    /*
    if(customKey >= '0' && customKey <= '9')
    {
      second = second * 10 + (customKey - '0');
      lcd.setCursor(5,0);
      lcd.print(second);
    }
    */
    if(customKey == 'D')
    {//baca();

     second=scale.get_units(10)*102,0;
     lcd.print(second);

    }

    if(customKey == '=') break;  //return second;
  }
 return second;
}

void menu3(){
  totalbawon=total/8;
  totalbersih=total-totalbawon;

if(totalbersih<=653000)
{
  char customKey =keypad.getKey();

  switch( customKey )
  {
```

```
   case 'A':
   lcd.clear();
   totalbawon=total/8;
    lcd.setCursor(0,0);
    lcd.print("TL= ");
    lcd.setCursor(5,0);
    lcd.print(total);
    lcd.setCursor(0,1);
    lcd.print("BWN= ");
    lcd.setCursor(5,1);
    lcd.print(totalbawon);
    break;

 case 'B':
    lcd.clear();
    bagianbawon=totalbawon/jumlahorang;
    lcd.setCursor(0,0);
    lcd.print("BWN= ");
    lcd.setCursor(5,0);
    lcd.print(totalbawon);
    lcd.setCursor(13,0);
    lcd.print("JML");
    lcd.setCursor(13,1);
    lcd.print(jumlahorang);
    lcd.setCursor(0,1);
    lcd.print("PER@= ");
    lcd.setCursor(6,1);
    lcd.print(bagianbawon);
     break;


 case 'C':
    lcd.clear();
    totalbersih=total-totalbawon;
    lcd.setCursor(0,0);
    lcd.print("TIDAK PERLU");
    lcd.setCursor(0,1);
    lcd.print("ZAKAT");
     break;

case 'D':
    lcd.clear();
    totalbersih=total-totalbawon;
    lcd.setCursor(0,0);
```

```
    lcd.print("TIDAK PERLU");
    lcd.setCursor(0,1);
    lcd.print("ZAKAT");
    break;
}

}

else if(totalbersih>=653000)
{
  char customKey =keypad.getKey();

  switch( customKey )
  {
   case 'A':
   lcd.clear();
   totalbawon=total/8;
    lcd.setCursor(0,0);
    lcd.print("TL= ");
    lcd.setCursor(5,0);
    lcd.print(total);
    lcd.setCursor(0,1);
    lcd.print("BWN= ");
    lcd.setCursor(5,1);
    lcd.print(totalbawon);
    break;

 case 'B':
    lcd.clear();
    bagianbawon=totalbawon/jumlahorang;
    lcd.setCursor(0,0);
    lcd.print("BWN= ");
    lcd.setCursor(5,0);
    lcd.print(totalbawon);
    lcd.setCursor(13,0);
    lcd.print("JML");
    lcd.setCursor(13,1);
    lcd.print(jumlahorang);
    lcd.setCursor(0,1);
    lcd.print("PER@= ");
    lcd.setCursor(6,1);
    lcd.print(bagianbawon);
     break;
```

```
 case 'C':
    lcd.clear();
    totalbersih=total-totalbawon;
    zakat1=(5*totalbersih)/100;
    lcd.setCursor(0,0);
    lcd.print("TLB= ");
    lcd.setCursor(5,0);
    lcd.print(totalbersih);
    lcd.setCursor(12,0);
    lcd.print("PRSN");
    lcd.setCursor(13,1);
    lcd.print("5%");
    lcd.setCursor(0,1);
    lcd.print("ZK1= ");
    lcd.setCursor(5,1);
    lcd.print(zakat1);
     break;

case 'D':
    lcd.clear();
    totalbersih=total-totalbawon;
    zakat2=(10*totalbersih)/100;
    lcd.setCursor(0,0);
    lcd.print("TLB= ");
    lcd.setCursor(5,0);
    lcd.print(totalbersih);
    lcd.setCursor(12,0);
    lcd.print("PRSN");
    lcd.setCursor(13,1);
    lcd.print("10%");
    lcd.setCursor(0,1);
    lcd.print("ZK2= ");
    lcd.setCursor(5,1);
    lcd.print(zakat2);
    break;
      } } }
```

BERITA ACARA
UJIAN SKRIPSI TA. 2020 / 2021
FAKULTAS TEKNIK
UNIVERSITAS MUHAMMADIYAH PONOROGO

Pada hari ini Rabu tanggal 28 Juli tahun 2021 (Dua Ribu Dua Puluh Satu) telah diselenggarakan Ujian Skripsi Tahun Akademik 2020 / 2021 untuk:

Nama Mahasiswa	: Samsul Hidayat
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Prodi	: Teknik Elektro
Judul Skripsi	: Timbangan Digital Untuk Menghitung Hasil Panen Padi, Upah Sistem Bawon Dan Pengeluaran Zakat Pertanian (Zakat Zira'ah)

Catatan atau revisi selama ujian berlangsung :

1. Revisi Judul
2. Revisi BAB 3 Dan BAB 4
3. Manfaat di revisi
4. Cek sumber pustaka dgn daftar pustaka
5. Metode perancangan
6. .....
7. .....
8. .....

Demikian berita acara ini dibuat agar dapat dipergunakan sebagaimana mestinya.

Ponorogo, ... 2021

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