

Lampiran

```

#include <LiquidCrystal_I2C.h>
#include <HX711.h>
#include <DHT.h>
#define DHTPIN 2
#define DHTTYPE DHT11
#define DT 3
#define SCK 4
#define BLOWER 5
#define HEATER 6
#define BUZZER 7
byte logo_suhu[8] =
{
  B00100,
  B01010,
  B01010,
  B01110,
  B11111,
  B11111,
  B01110,
  B00000
};
HX711 scale;
DHT dht(DHTPIN, DHTTYPE);
LiquidCrystal_I2C lcd(0x27, 16, 2);
float calibration_factor = 104500;
int minSuhu = 35;
int makSuhu = 40;
void setup() {
  lcd.begin();
  lcd.createChar(1, logo_suhu);
  scale.begin(DT, SCK);

```



```

dht.begin();
pinMode(BLOWER, OUTPUT);
pinMode(HEATER, OUTPUT);
pinMode(BUZZER, OUTPUT);
blowerOFF();
heaterOFF();
buzzerOFF();
scale.set_scale();
scale.tare();
scale.set_scale(calibration_factor);
lcd.setCursor(0, 0);
lcd.print("Inisialisasi...");
delay(2000);
buzzerON(2);
lcd.clear();
}
//-----
void loop() {
  float beratAwal;
  float beratAkhir;
  lcd.setCursor(0, 0);
  lcd.print("Alat Siap!");
  while(scale.get_units() < 1);
  lcd.clear();
  buzzerON(1);
  if(scale.get_units() >= 1 && scale.get_units() <= 15){
    lcd.setCursor(0, 0);
    lcd.print("Menimbang...");
    delay(5000);
    buzzerON(2);
    lcd.clear();
    beratAwal = scale.get_units();
    beratAkhir = beratAwal * 60 / 100;

```

```
lcd.setCursor(0, 0);  
lcd.print("Berat Kacang:");  
lcd.setCursor(0, 1);  
lcd.print(beratAwal);  
lcd.setCursor(14, 1);  
lcd.print("Kg");  
delay(2000);  
lcd.clear();  
} else {  
  lcd.setCursor(0, 0);  
  lcd.print("Over load!");  
  buzzerON(3);  
  delay(2000);  
  lcd.clear();  
  return;  
}  
lcd.setCursor(0, 0);  
lcd.write(1);  
lcd.setCursor(1, 0);  
lcd.print("Temp:");  
lcd.setCursor(9, 0);  
lcd.print((char)223);  
lcd.setCursor(10, 0);  
lcd.print("C");  
lcd.setCursor(0, 1);  
lcd.print("Berat:");  
heaterON();  
jalan:  
  int suhu = dht.readTemperature();  
  float berat = scale.get_units();  
  lcd.setCursor(7, 0);  
  lcd.print(suhu);  
  lcd.setCursor(7, 1);
```



```

lcd.print(scale.get_units(),2);
if(dht.readTemperature() >= makSuhu){
  heaterOFF();
  buzzerON(1);
  blowerON();
} else if(dht.readTemperature() <= minSuhu){
  heaterON();
  buzzerON(1);
  blowerOFF();
}
if(berat <= beratAkhir){
  heaterOFF();
  blowerOFF();
  lcd.clear();
  buzzerON(2);
  lcd.setCursor(0, 0);
  lcd.print("Selesai!");
  while(scale.get_units() >= 1 / 2);
  delay(2000);
  lcd.clear();
  buzzerON(2);
  return;
}
goto jalan;
}
//-----
void blowerON(){
  digitalWrite(BLOWER, LOW);
}
void blowerOFF(){
  digitalWrite(BLOWER, HIGH);
}
void heaterON(){

```

```
digitalWrite(HEATER, LOW);  
}  
void heaterOFF(){  
    digitalWrite(HEATER, HIGH);  
}  
void buzzerON(int kali){  
    for(int i = 1; i <= kali; i++){  
        digitalWrite(BUZZER, HIGH);  
        delay(50);  
        buzzerOFF();  
        delay(50);  
    }  
}  
void buzzerOFF(){  
    digitalWrite(BUZZER, LOW);  
}
```

