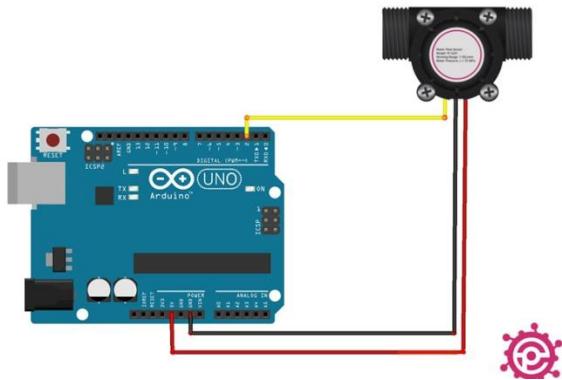


## **DAFTAR PUSTAKA**

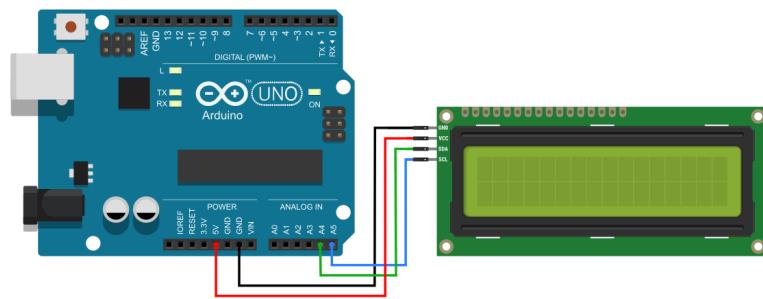
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## LAMPIRAN

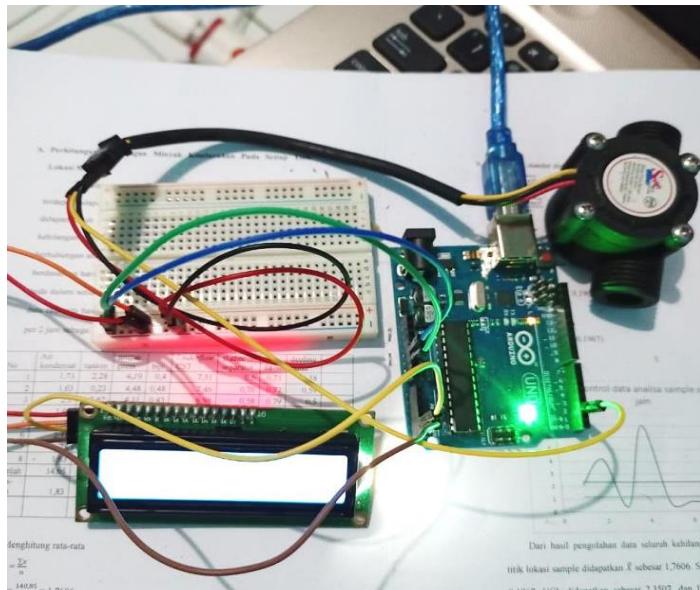
### A. Rangkaian Sensor Water Flow



### B. Rangkaian Mikrokontroler Arduino Uno



### C. Rangkain Rancang Bangun Alat Ukur Debit Air



#### D. Kotak Tempat Alat ( BOX)



#### E. Pemograman

```
#include <Wire.h>
#include <LiquidCrystal_I2C.h>
LiquidCrystal_I2C lcd(0x27, 16, 2);
byte sensorInt = 0;
byte flowsensor =2;
float konstanta = 4.5;
byte pulseCount = 0;

float debit;
unsigned int flow_mlt;
unsigned long total_mlt;
unsigned long oldTime;

void setup (){
lcd.begin(16,2);
lcd.setBacklight(HIGH);
pinMode(flowsensor,INPUT);
digitalWrite(flowsensor,HIGH);
pulseCount = 0;
debit = 0,0;
flow_mlt = 2;
```

```
oldTime = 0;
attachInterrupt(sensorInt,pulseCounter,FALLING);
}

void loop (){
if((millis()-oldTime)>1000.0)
{
detachInterrupt (sensorInt);
debit = ((1000.0/(millis()-oldTime))*pulseCount)/konstanta;
oldTime = millis ();
flow_mlt = (debit*60 ) /7;
total_mlt += flow_mlt ;
unsigned int frac;

lcd.setCursor(0,0);
lcd.print("Debit Air:");
lcd.print(int(debit));
lcd.print("L/mt");
lcd.backlight();

lcd.setCursor(0,1);
lcd.print("Volume:");
lcd.print(total_mlt);
lcd.backlight();
lcd.print("mL");
lcd.backlight();

pulseCount = 0
attachInterrupt(sensorInt,pulseCounter,FALLING);
```

F. Proses Pengujian Alat Sensor Water Flow



G. Proses Pengujian Sensor Water Flow Dengan Wadah Ukur



H. PROSES HASIL DATA



