ANALOG INPUT DENGAN TAMPILAN LED BARGRAPH

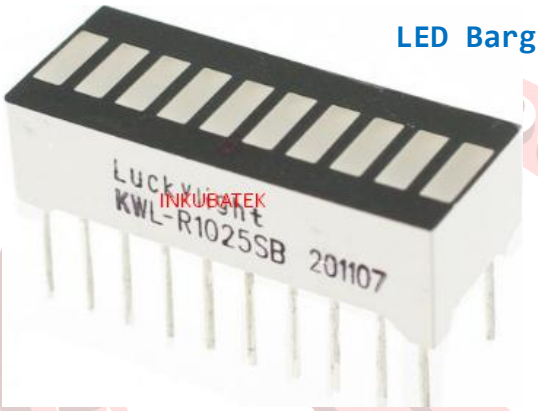
Sistem Kerja Alat:

Arduino UNO membaca nilai analog input di A0 kemudian hasilnya ditampilkan dalam bentuk bargraph di LED.

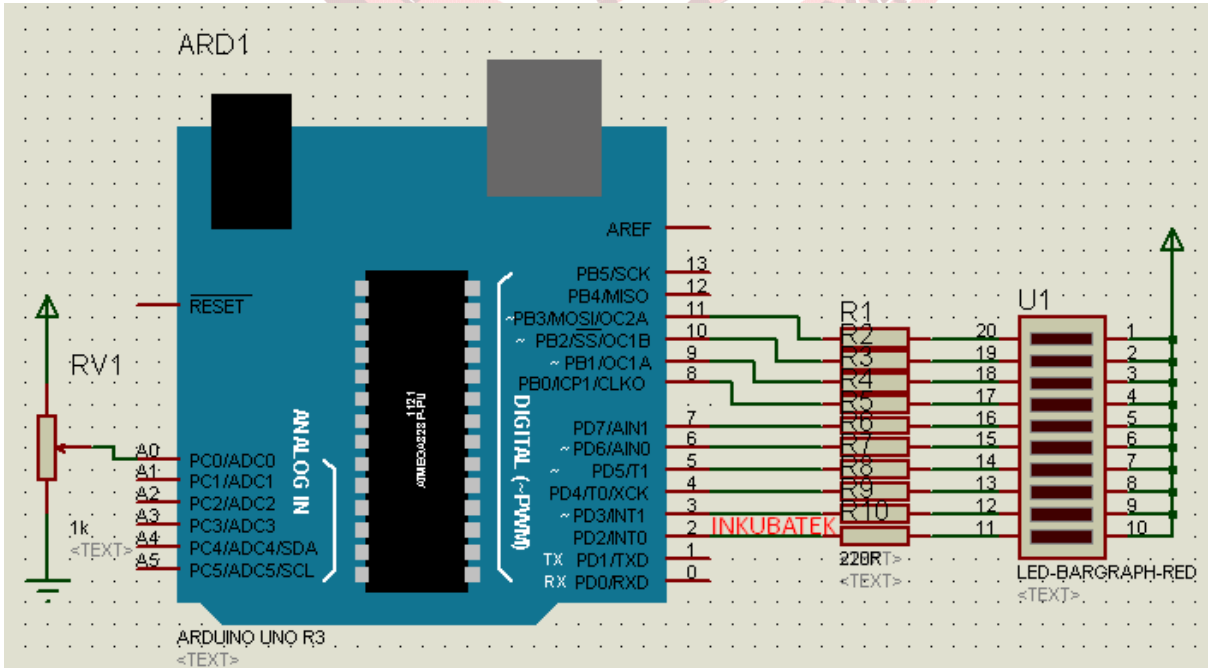
Kebutuhan Hardware :

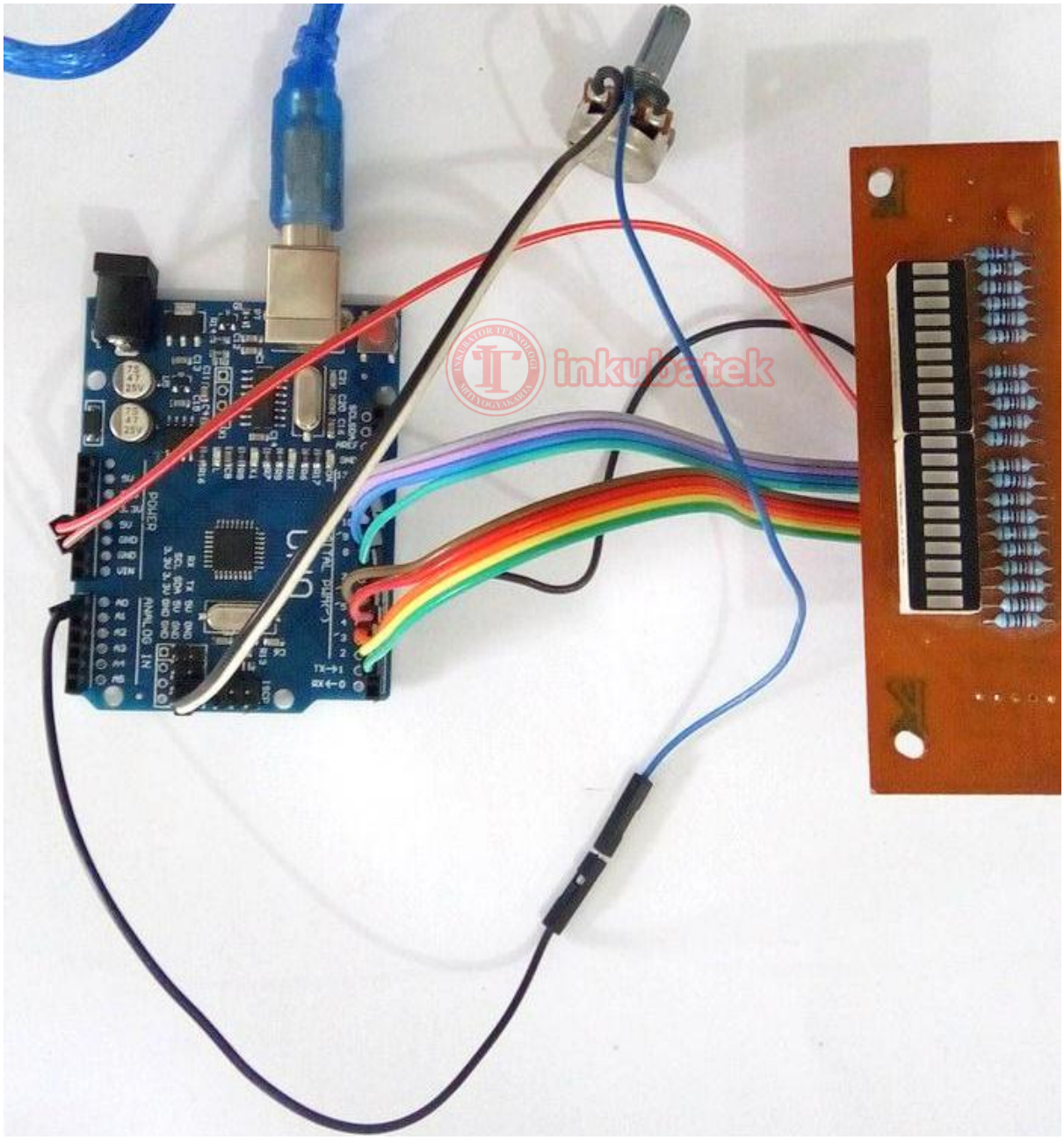
- Arduino UNO Board
- Potensiometer sebagai *voltage devider*
- Modul LED bargraph (10 LED)
- Power Supply 7-9 Vdc

LED Bargraph



Schematics





Source Code/Sketch :

```
/************************************
 * Program : Project 8. Analog Input Tampilan Bargraph LED
 * Input   : Potensiometer
 * Output  : LED Bargraph 8 LED
 * 125 Proyek Arduino Inkubatek
 * www.tokotronik.com
 * ************************************/
```

```
const int ledCount = 10;
int adc0;

int ledPins[] = {
  2, 3, 4, 5, 6, 7, 8, 9, 10, 11
};

void setup() {
  for (int Led = 0; Led < ledCount; Led++) {
    pinMode(ledPins[Led], OUTPUT);
  }

}

void loop() {
  adc0 = analogRead(A0);
  int ledLevel = map(adc0, 0, 1023, 0, ledCount);
  for (int Led = 0; Led < ledCount; Led++) {
    if (Led < ledLevel) {
      digitalWrite(ledPins[Led], LOW);
    }

    else {
      digitalWrite(ledPins[Led], HIGH);
    }
  }
}
```

Jalannya Alat :

Putar potensio yang terhubung ke ADC0 dan perhatikan LED bargraph akan nyala sesuai dengan tegangan yang masuk ke ADC0. Jika tegangan maksimal (5 V) maka 10 LED pada LED bargraph akan nyala semua.