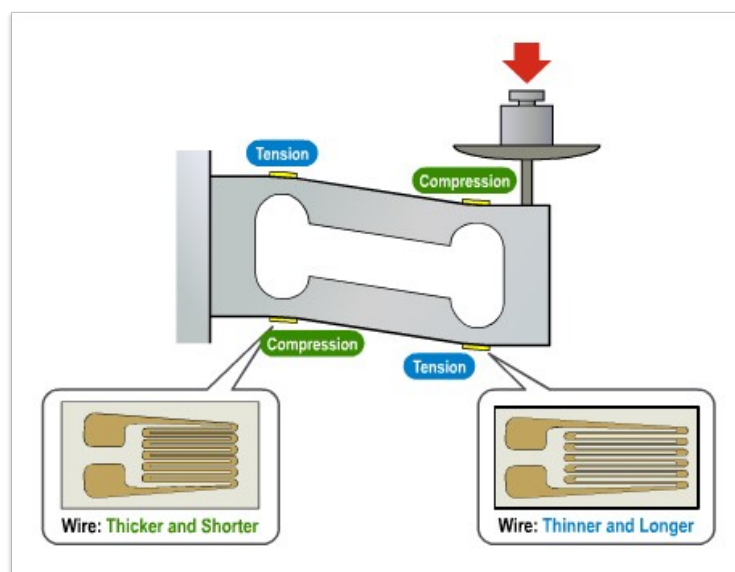


Modul 6 dan 7

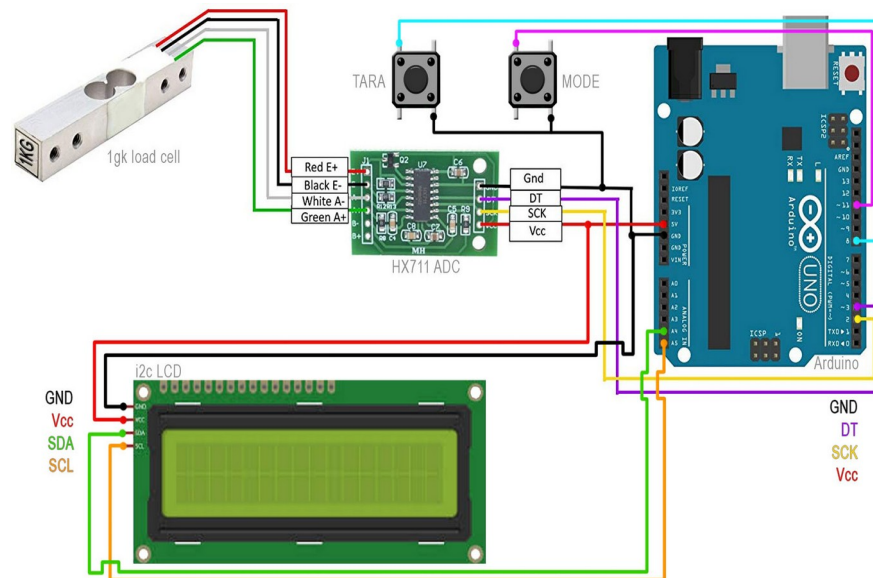
Load Cell

Load cell adalah transduser gaya. Ini mengubah gaya seperti tegangan, kompresi, tekanan, atau torsi menjadi sinyal listrik yang dapat diukur dan distandarisasi. Ketika gaya yang diterapkan pada sel beban meningkat, sinyal listrik berubah secara proporsional.



JOBSHEET 6 dan 7

Lakukan perakitan komponen pada gambar di bawah ini dan upload kode program kemudian lakukan pengukuran berat atau masa sebuah benda dari 100 gram sampai dengan 1 kg.



Kode program :

```
#include "HX711.h"
```

```
// HX711.DOUT - pin #A1
```

```
// HX711.PD_SCK - pin #A0
```

```
HX711 scale(A1, A0); // parameter "gain" is omitted; the default value 128 is used by the library
```

```
void setup() {
```

```
  Serial.begin(38400);
```

```
  Serial.println("HX711 Demo");
```

```
  Serial.println("Before setting up the scale:");
```

```
  Serial.print("read: \t\t");
```

```
  Serial.println(scale.read());
```

```
// print a raw reading from the ADC
```

```
  Serial.print("read average: \t\t");
```

```
  Serial.println(scale.read_average(20));
```

```
// print the average of 20 readings from the ADC
```

```
  Serial.print("get value: \t\t");
```

```
  Serial.println(scale.get_value(5));
```

```
// print the average of 5 readings from the ADC
```

```
  minus the tare weight (not set yet)
```

```
  Serial.print("get units: \t\t");
```

```
  Serial.println(scale.get_units(5), 1);
```

```
// print the average of 5 readings from the ADC minus tare
```

```
  weight (not set) divided
```

```

// by the SCALE parameter (not set yet)

scale.set_scale(2280.f);          // this value is obtained by calibrating the scale with known
weights; see the README for details
scale.tare();                     // reset the scale to 0

Serial.println("After setting up the scale:");

Serial.print("read: \t\t");
Serial.println(scale.read());     // print a raw reading from the ADC

Serial.print("read average: \t\t");
Serial.println(scale.read_average(20)); // print the average of 20 readings from the ADC

Serial.print("get value: \t\t");
Serial.println(scale.get_value(5)); // print the average of 5 readings from the ADC
minus the tare weight, set with tare()

Serial.print("get units: \t\t");
Serial.println(scale.get_units(5, 1)); // print the average of 5 readings from the ADC minus
tare weight, divided
// by the SCALE parameter set with set_scale

Serial.println("Readings:");
}

void loop() {
  Serial.print("one reading:\t");
  Serial.print(scale.get_units(), 1);
  Serial.print("\t| average:\t");
  Serial.println(scale.get_units(10), 1);

  scale.power_down();           // put the ADC in sleep mode
  delay(5000);
  scale.power_up();
}

```

**LAPORAN HASIL
PERCOBAAN:**