APPENDIX

The above code 1-12 is an addition to the library and determines the port for Arduino Uno

```
1.  #include <Servo.h>  // menambahkan  libray servo
2.  #include <HX711_ADC.h> //menambahkan libray timbangan
3.  #include "DHT.h" // menambahkan libray suhu
4.  #define DHTPIN 8 //menambahkan angka 8 sebagai port milik dht
5.  #define DHTTYPE DHT11 //menambahkan dht11 sebagai type dht
6.  int sensor_hujan = A1;  //sebagai port Sensor Hujan
7.  int hujan,cahaya,suhu,berat; //var kontrol
8.  int HX711_dout = 6; //menambahkan angka 6 sebagai value dari variabel
    HX711_dout
9.  int HX711_sck = 9; //menambahkan angka 9 sebagai value dari variabel
    HX711_sck
10. Servo myservo;
11. DHT dht(DHTPIN, DHTTYPE);
12. HX711_ADC LoadCell (HX711_dout, HX711_sck);
```

The code 13-22 above is void setup is a sketch or Arduino program starts, running the void setup() function. This function is used to initialize variables, declare which pins to use, use libraries, etc..

```
13. void setup() {
14.    Serial.begin(9600);
15.    myservo.attach(11);
16.    pinMode(sensor_hujan, INPUT);
17.    dht.begin();
18.    LoadCell.begin();
19.    LoadCell.start(2000);
20.    LoadCell.setCalFactor(1.0);
21. }
22. uint8_t panas, terang;
```

Void loop()

```
23.  void loop() {
```

Reading light sensor

```
24. //cahaya
25.    int analogValue = analogRead(A0);
26.    Serial.println("nilai"+String(analogValue));
27.    Serial.println((String)((terang=!(analogValue        >
    700))?"terang":"gelap")+"\r\n");
```

Reading rain sensor

```
28.    //hujan
29. Serial.println((String)((hujan=(!digitalRead(sensor_hujan)))?"hujan":"
    cerah")+"\r\n");   }
```

Reading temperature sensor

```
30. //temperatur
```

```
31.    float suhu = dht.readTemperature();
32.    Serial.println((String)"Suhu: " + String(suhu));
33.    Serial.println((String)((panas=suhu>30)?"panas":"dingin")+"\r\n");
```

Reading the weighing sensor

```
34. //timbangan
35.    LoadCell.update();
36.    int32_t berat = LoadCell.getData();
37.    Serial.print((String)"Weight:" + String(berat)+"\r\n");
38.    berat=berat>50;
```

Execute the all sensor

```
39.    myservo.write((berat?hujan?0:terang?panas?1:0:0:0)?150:10);
40.
41.    delay(3000);
42. }
```

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