Lampiran

```
#include <LiquidCrystal_I2C.h>
#include <virtuabotixRTC.h>

LiquidCrystal_I2C lcd(0x3f,2,1,0,4,5,6,7,3,POSITIVE);
virtuabotixRTC myRTC(9, 10, 11); //KAKI rtc(clk,dat,rs)

#define relay 12
#define sensor1 A0
#define sensor2 A1
#define sensor3 A2

int pilih,detik,x,menit,m;

void setup() {
  // put your setup code here, to run once:
Serial.begin(9600);
myRTC.setDS1302Time(50, 59, 23, 6, 10, 1, 2014);   //detik, menit, jam, tanggal,
bulan, tahun
pinMode(relay, OUTPUT);
pinMode(sensor1, INPUT_PULLUP);
pinMode(sensor2, INPUT_PULLUP);
```

```
pinMode(sensor3, INPUT_PULLUP);
lcd.begin(16, 2);
lcd.setCursor(0,0);
lcd.print("  SKRIPSI 2018  ");
lcd.setCursor(0,1);
lcd.print(" TEKNIK ELEKTRO ");
delay(2000);
lcd.clear();
}

void loop() {
  kerja();
  //rtc();
  //sensor();
}

void kerja() {
  switch(pilih) {
    case 0:{
      Serial.println("case 0");
      delay(1000);
      pilih=1;
      break;
```

```
    }
    case 1:{
      Serial.println("case 1");
      x=0;
      rtc();
      sensor();
      digitalWrite(relay, LOW);
      if(digitalRead(sensor1)==1 && digitalRead(sensor2)==1 &&
digitalRead(sensor3)==1) {
       pilih=2;
        break;
      }
      if(myRTC.hours==0 && myRTC.minutes==0 && myRTC.seconds==30) {
       pilih=3;
        break;
      }
      if(myRTC.hours==0 && myRTC.minutes==1 && myRTC.seconds==0) {
        pilih=3;
        break;
      }
      if(myRTC.hours==0 && myRTC.minutes==1 && myRTC.seconds==30) {
        pilih=3;
        break;
```

```
  }
  if(myRTC.hours==0 && myRTC.minutes==2 && myRTC.seconds==0) {
    pilih=3;
    break;
  }
  break;
}

case 2:{
  Serial.println("case 2");
  digitalWrite(relay, HIGH);
  while(x<5) {
  rtc();
  lcd.setCursor(0,1);
  lcd.print("KOTORAN MENUMPUK");
  delay(1000);
  lcd.clear();
  rtc();
  lcd.setCursor(1,1);
  lcd.print("  PEMBERSIHAN  ");
  delay(1000);
  lcd.clear();
  x++;
```

```
  }
  pilih=4;
  break;
}
case 3:{
  Serial.println("case 3");
  while(x<5) {
  sensor();
  digitalWrite(relay, HIGH);
  lcd.setCursor(1,0);
  lcd.print(" SAATNYA UNTUK ");
  delay(1000);
  lcd.clear();
  sensor();
  lcd.setCursor(1,0);
  lcd.print("  PEMBERSIHAN  ");
  delay(1000);
  lcd.clear();
  x++;
  }
  pilih=4;
  break;
}
```

```
    case 4:{
      digitalWrite(relay, LOW);
      rtc();
      lcd.clear();
      delay(2000);
      pilih=1;
      break;
    }
  }
}

void sensor() {
  lcd.setCursor(1,1);
  lcd.print("Status > ");
  lcd.setCursor(10,1);
  lcd.print(digitalRead(sensor1));
  lcd.setCursor(12,1);
  lcd.print(digitalRead(sensor2));
  lcd.setCursor(14,1);
  lcd.print(digitalRead(sensor3));
}

void rtc() {
```

```
  myRTC.updateTime();
  lcd.setCursor(4,0);
  lcd.print(myRTC.hours);
  lcd.setCursor(6,0);
  lcd.print(":");
  lcd.setCursor(7,0);
  lcd.print(myRTC.minutes);
  lcd.setCursor(9,0);
  lcd.print(":");
  lcd.setCursor(10,0);
  lcd.print(myRTC.seconds);

  if(myRTC.seconds==59) {
    lcd.clear();
  }
}
```