Batch 1

PHASE 2

BANK ALARM SYSTEM

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Code:

int LIGHT\_SENSOR=1;

int ULTRASONIC\_TRIGGER\_PIN=6;

int ULTRASONIC\_ECHO\_PIN =7;

int GAS\_SENSOR=A0;

int ALARM\_PIN=9;

int light\_value = 0;

long distance = 0;

int gas\_value = 0;

void setup() {

  pinMode(LIGHT\_SENSOR, INPUT);

  pinMode(ULTRASONIC\_TRIGGER\_PIN, OUTPUT);

  pinMode(ULTRASONIC\_ECHO\_PIN, INPUT);

  pinMode(GAS\_SENSOR,INPUT);

  pinMode(ALARM\_PIN, OUTPUT);

  digitalWrite(ALARM\_PIN, LOW);

  Serial.begin(9600);

}

void loop() {

  light\_value = analogRead(LIGHT\_SENSOR);

  distance = getDistance();

  gas\_value = analogRead(GAS\_SENSOR);

   if(distance < 20 && gas\_value > 250) {

    digitalWrite(ALARM\_PIN, HIGH);

    delay(5000);

    digitalWrite(ALARM\_PIN, LOW);

    delay(1000);

  }

  else if(light\_value <100 && distance < 20 ) {

    digitalWrite(ALARM\_PIN, HIGH);

    delay(5000);

    digitalWrite(ALARM\_PIN, LOW);

    delay(1000);

  }

  else if(distance < 20 && gas\_value > 250){

    digitalWrite(ALARM\_PIN, HIGH);

    delay(5000);

    digitalWrite(ALARM\_PIN, LOW);

    delay(1000);

  }

Serial.println(distance);

Serial.println(light\_value);

Serial.println(gas\_value);

delay(100);

}

long getDistance() {

  digitalWrite(ULTRASONIC\_TRIGGER\_PIN, LOW);

  delay(50);

  digitalWrite(ULTRASONIC\_TRIGGER\_PIN, HIGH);

  delay(50);

  digitalWrite(ULTRASONIC\_TRIGGER\_PIN, LOW);

  return 0.0347\*pulseIn(ULTRASONIC\_ECHO\_PIN, HIGH) / 2;

}