```
const int echoPin = 8;
const int trigPin = 9;



long duration;
int distance;


void setup() {
  pinMode(trigPin, OUTPUT);      // Sets the trigPin as an OUTPUT
  pinMode(echoPin, INPUT);       // Sets the echoPin as an INPUT
  Serial.begin(9600);            // Serial Communication is starting with 9600 of baudrate speed


}
void loop() {


  while(getDistance() > 25){ }


  int startTime = millis();


  while(getDistance() <25){
   int newTime = millis();        //record the current time


  if (newTime - startTime > 3000){
    Serial.write("1");           // send message to screen to open
    Serial.println('\n');
    break;                       // get out so only send message once
  }
  }
```

```
  while(getDistance() < 25){ }
}

int getDistance(){              // defining the function to calculate the distance

  digitalWrite(trigPin, LOW);
  delayMicroseconds(2);

  digitalWrite(trigPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin, LOW);

  duration = pulseIn(echoPin, HIGH);
  distance = duration * 0.034 / 2;        // Calculating the distance

  return distance;
}
```