#include<LiquidCrystal.h>

LiquidCrystal lcd(2,3,4,5,6,7);

#define in 8

#define out 9

#define fan 10

int count=0;

void setup()

{

  lcd.begin(16,2);

  lcd.print("Visitor Counter");

  delay(2000);

  pinMode(in, INPUT);

  pinMode(out, INPUT);

  pinMode(fan, OUTPUT);

  lcd.clear();

  lcd.print("Person In Room:");

  lcd.setCursor(0,1);

  lcd.print(count);

}

void loop()

{

  int in\_value = digitalRead(in);

  int out\_value = digitalRead(out);

  if(in\_value == LOW)

  {

    count++;

    lcd.clear();

    lcd.print("Person In Room:");

    lcd.setCursor(0,1);

    lcd.print(count);

    delay(1000);

  }

  if(out\_value == LOW)

  {

    count--;

    lcd.clear();

    lcd.print("Person In Room:");

    lcd.setCursor(0,1);

    lcd.print(count);

    delay(1000);

  }

  if(count==0)

  {

    lcd.clear();

    digitalWrite(fan, LOW);

    lcd.clear();

    lcd.print("Nobody In Room");

    lcd.setCursor(0,1);

    lcd.print("Fan is Off");

    delay(200);

  }

  else

  {

    digitalWrite(fan, HIGH);

  }

}