Code:

```
#include<LiquidCrystal.h>
LiquidCrystal lcd(13,12,11,10,9,8);
#define in 14
#define out 19
#define relay 2
int count=0;
void IN()
{
  count++;
  lcd.clear();
  lcd.print("Person In Room:");
  lcd.setCursor(0,1);
  lcd.print(count);
  delay(1000);
}
void OUT()
{
 count--;
  lcd.clear();
  lcd.print("Person In Room:");
  lcd.setCursor(0,1);
  lcd.print(count);
  delay(1000);
}
void setup()
 lcd.begin(16,2);
 lcd.print("Visitor Counter");
 delay(2000);
 pinMode(in, INPUT);
 pinMode(out, INPUT);
```

```
pinMode(relay, OUTPUT);
 lcd.clear();
 lcd.print("Person In Room:");
 lcd.setCursor(0,1);
 lcd.print(count);
}
void loop()
{
 if(digitalRead(in))
 IN();
 if(digitalRead(out))
 OUT();
 if(count<=0)
  lcd.clear();
  digitalWrite(relay, LOW);
  lcd.clear();
  lcd.print("Nobody In Room");
  lcd.setCursor(0,1);
  lcd.print("Light Is Off");
  delay(200);
 }
 else
  digitalWrite(relay, HIGH);
}
```