Question :- **Design a visitor counting system with the help of LDR for a hall. Assume that only one person can pass through the door at any time and also there are separate entry and exit doors. Note: The visitor count needs to be displayed on the serial monitor at all times.**

Components used:-

LDR,   Resistor(100K) ohm,   Jumper cables, Arduino UNO R3, Bread board.

Theory:-

The sensors that can be used to detect light is called LDR. The LDR gives us an analog voltage when connected to 5Volt, which varies in magnitude in direct proportion to the input light intensity on it.

The greater the intensity of light the greater will be the corresponding to LDR. Since, the LDR gives an analog voltage , it is connected to analog pin of Arduino.

CODE:-

```
void setup()
{
  pinMode(A0,INPUT);
  Serial.begin(9600);
}
int count=0;
void loop()
{
  int tag=0;
  if(analogRead(A0)<800)
    tag=1;
  if(analogRead(A0)<800&&tag==1){
    count++;
    Serial.println(count);
    tag=0;
    delay(1000);
  }
}
```

Precautions:-

1. Use the appropriate range for sensor value.
2. Wires should be connected in proper manner.

Learning and Outcomes:-

We learn an another application of Arduino.

We learnt about the concept of Arduino.