

Assignment -1

Home Automation

Assignment Date	19 September 2022
Student Name	Mr. Kumaran S
Student Roll Number	310619106065
Maximum Marks	2 Marks

Question-1:

Home Automation using TinkerCAD (Minimum of 2 sensors)

Solution:

```
#define LED 9
#define PIR 4
int ldr=0;
int pir=LOW;
int val;
void setup()
{
  Serial.begin(9600);
  pinMode(LED, OUTPUT);
  pinMode(PIR, INPUT);
}
void loop()
{
  ldr = analogRead(A1);
  val = map(ldr, 0,1023, 0,255);
  val = val - 255;
  pir = digitalRead(PIR);
  Serial.println(ldr);
  Serial.println(val);
  Serial.println(pir);
  if(pir==HIGH){
    analogWrite(LED, val);
    delay(250);
  }
}
```

Link: <https://www.tinkercad.com/things/CH72arjRDU1-light-on-based-on-ldr-and-pir-/editel>

Schematic:

