

**Assignment -1**  
Home Automation

Assignment Date	19 September 2022
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Maximum Marks	2 Marks

**Question-1:**

Home Automation using TinkerCAD ( Minimum 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:

