**Assignment -1**

Home Automation

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| Assignment Date | 19 September 2022 |
| Student Name | Mr. Poovarasan M |
| Student Roll Number | 310619106098 |
| Maximum Marks | 2 Marks |

**Question-1:**

Home Automation using TinkerCAD ( Minimum 2 sensors)

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| **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); | |  | } | |  | } | |
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**Link:** <https://www.tinkercad.com/things/cH72arjRDU1-light-on-based-on-ldr-and-pir-/editel>

**Schematic:**

