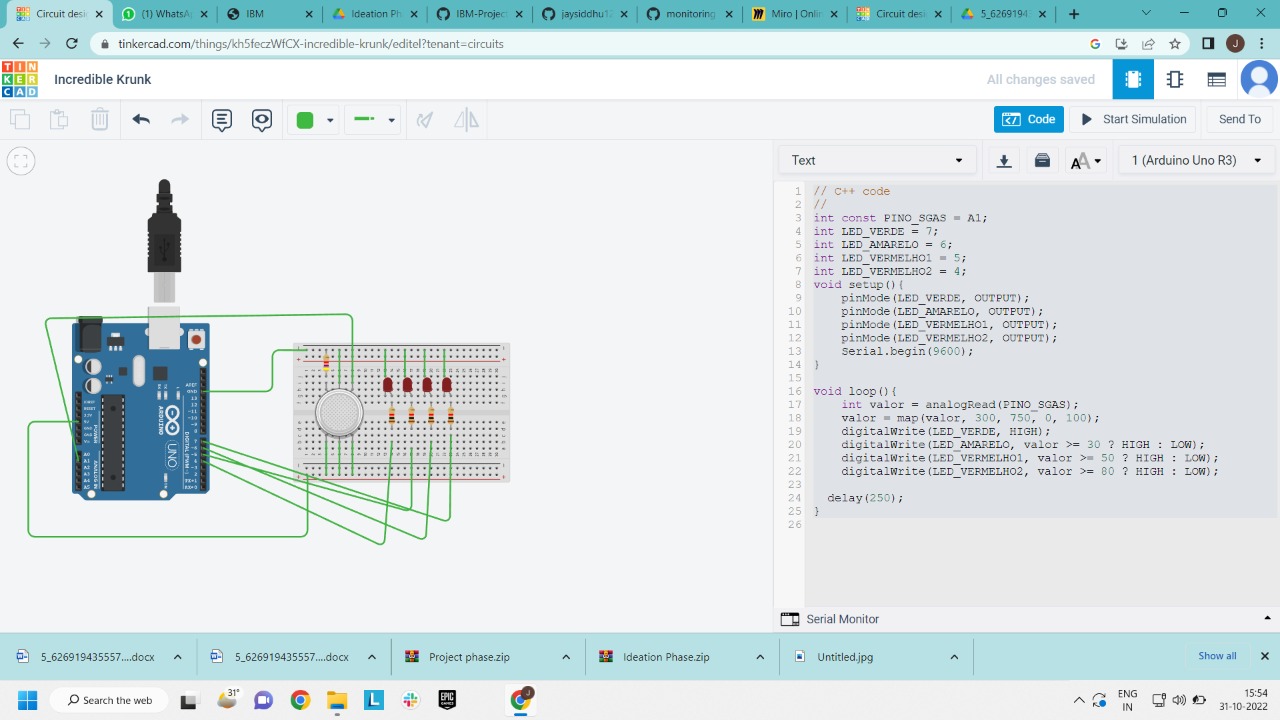
**Assignment -1**

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| --- | --- |
| Assignment Date | 08 October 2022 |
| Student Name | Lakshmikanth T |
| Student Roll Number | 7179KCTKCTKCTKCTKCTKCTKCT19BCS005 |

**Question:**

Build a smart home in Thinkercad with 2 sensors, an Led, buzzer and submit it.

**Solution:**



// C++ code

//

int const PINO\_SGAS = A1;

int LED\_VERDE = 7;

int LED\_AMARELO = 6;

int LED\_VERMELHO1 = 5;

int LED\_VERMELHO2 = 4;

void setup(){

pinMode(LED\_VERDE, OUTPUT);

pinMode(LED\_AMARELO, OUTPUT);

pinMode(LED\_VERMELHO1, OUTPUT);

pinMode(LED\_VERMELHO2, OUTPUT);

Serial.begin(9600);

}

void loop(){

int valor = analogRead(PINO\_SGAS);

valor = map(valor, 300, 750, 0, 100);

digitalWrite(LED\_VERDE, HIGH);

digitalWrite(LED\_AMARELO, valor >= 30 ? HIGH : LOW);

digitalWrite(LED\_VERMELHO1, valor >= 50 ? HIGH : LOW);

digitalWrite(LED\_VERMELHO2, valor >= 80 ? HIGH : LOW);

delay(250);

}