

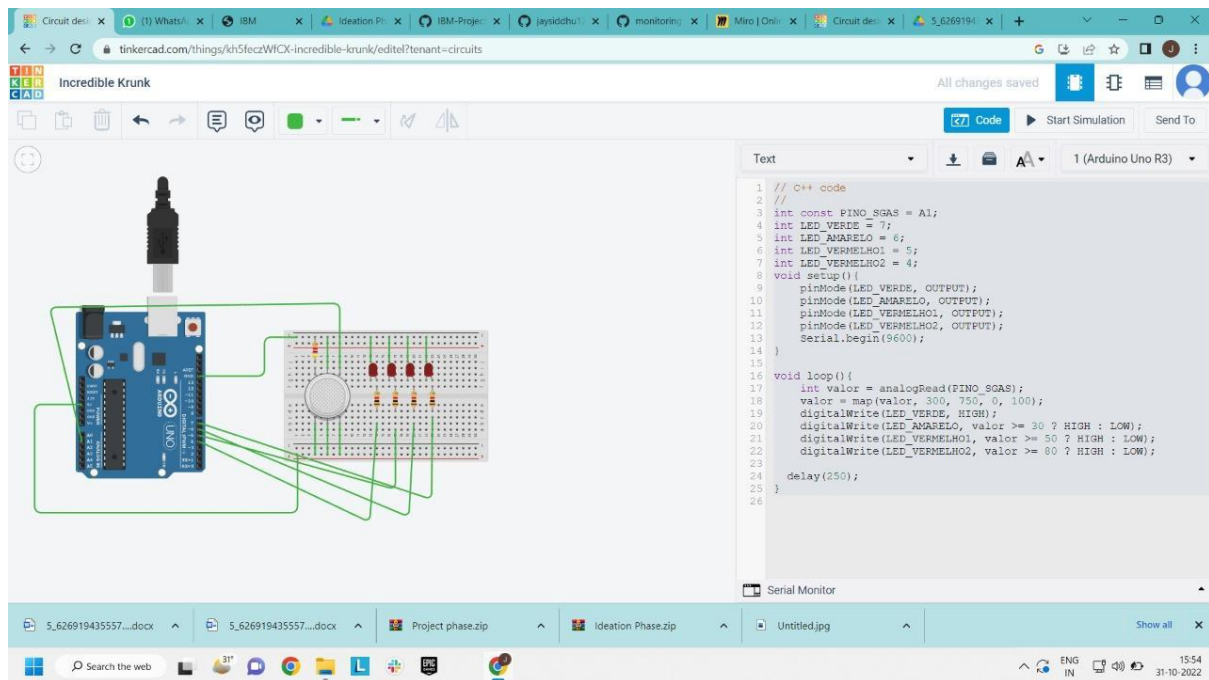
Assignment -1

Assignment Date	08 October 2022
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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);
}
```