# **ASSESSMENT-4**

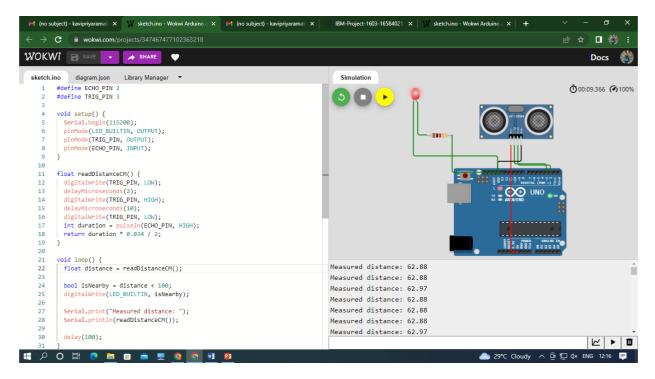
|                 | 05            |
|-----------------|---------------|
| ASSESSMENT DATE | November 2022 |
| NAME            | KAVIPRIYA R   |
| REGISTER NUMBER | 621319106039  |
| MARKS           | 2 Marks       |

#### **PROBLEM:**

### **CODE:**

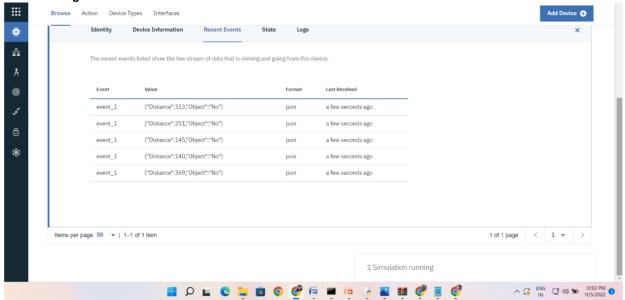
```
#define ECHO_PIN 2
#define TRIG_PIN 3
void setup() {
  Serial.begin(115200);
  pinMode(LED_BUILTIN, OUTPUT);
 pinMode(TRIG_PIN, OUTPUT);
 pinMode(ECHO_PIN, INPUT);
float readDistanceCM() {
  digitalWrite(TRIG_PIN, LOW);
  delayMicroseconds(2);
  digitalWrite(TRIG_PIN, HIGH);
  delayMicroseconds(10);
  digitalWrite(TRIG_PIN, LOW);
  int duration = pulseIn(ECHO_PIN, HIGH);
  return duration * 0.034 / 2;
void loop() {
  float distance = readDistanceCM();
  bool isNearby = distance < 100;</pre>
  digitalWrite(LED_BUILTIN, isNearby);
  Serial.print("Measured distance: ");
  Serial.println(readDistanceCM());
 delay(100);
```

## **SIMULATION:**



# Link: https://wokwi.com/projects/347467477102363218

When object distance is >100:



# When object distance is <100:

