ASSESSMENT-4

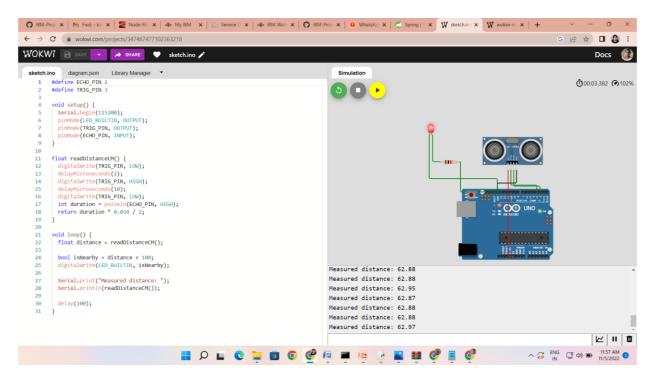
ASSESSMENT DATE	05 November 2022
NAME	KAVIYA S
REGISTER NUMBER	621319106040
MARKS	2 Marks

PROBLEM:

CODE:

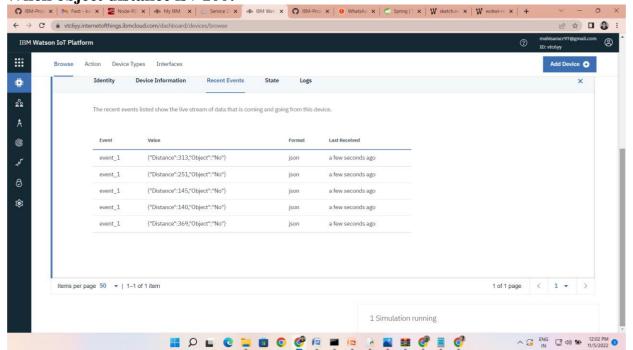
```
#define ECHO_PIN 2
#define TRIG_PIN 3
void setup() {
  Serial.begin(115200);
  pinMode(LED_BUILTIN, OUTPUT);
  pinMode(TRIG_PIN, OUTPUT);
  pinMode(ECHO_PIN, INPUT);
float readDistanceCM() {
  digitalWrite(TRIG_PIN, LOW);
  delayMicroseconds(2);
  digitalWrite(TRIG_PIN, HIGH);
  delayMicroseconds(10);
  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:

