Iot Smart Bridge Externship Assignment – 1

Shruti Sridhar

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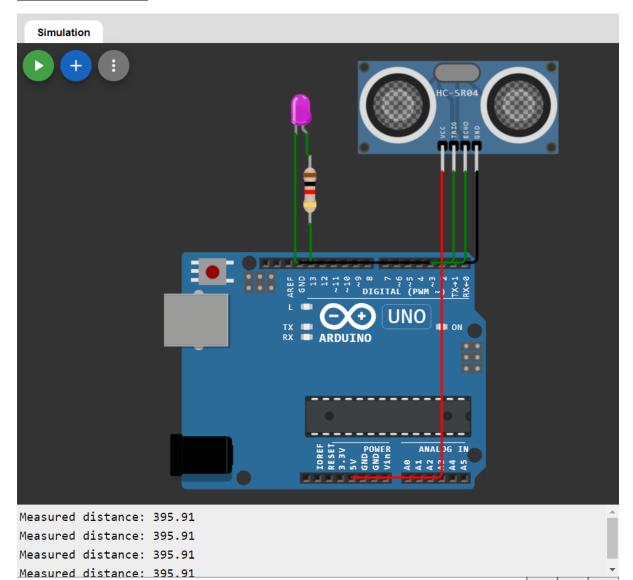
Question: In Wokwi, if the distance is less than 100cm for ultrasonic sensor, glow a LED.

https://wokwi.com/projects/365966380886140929

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(500);
```

Diagram and output



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