VSB Engineering College, Karur-639111

Department of Electronics and Communication Engineering

IoT Assignment

Topic : Assignment on temperature and humidity sensing and alarm

DOMAIN NAME : Internet Of Things

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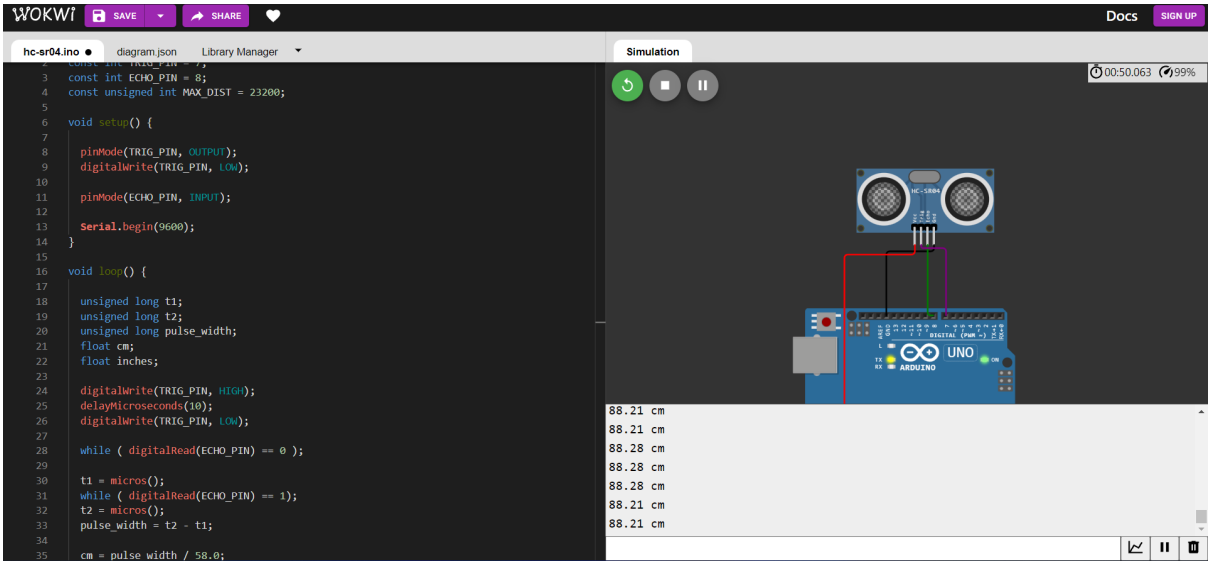
Coding:

```
const int TRIG_PIN = 7;
const int ECHO_PIN = 8;
const unsigned int MAX_DIST = 23200;

void setup() {

  pinMode(TRIG_PIN, OUTPUT);
  digitalWrite(TRIG_PIN, LOW);

  pinMode(ECHO_PIN, INPUT);

  Serial.begin(9600);
}

void loop() {

  unsigned long t1;
```

```
 unsigned long t2;
 unsigned long pulse_width;
 float cm;
 float inches;

 digitalWrite(TRIG_PIN, HIGH);
 delayMicroseconds(10);
 digitalWrite(TRIG_PIN, LOW);

 while ( digitalRead(ECHO_PIN) == 0 );

 t1 = micros();
 while ( digitalRead(ECHO_PIN) == 1);
 t2 = micros();
 pulse_width = t2 - t1;

 cm = pulse_width / 58.0;
 inches = pulse_width / 148.0;


 if ( pulse_width > MAX_DIST ) {
  Serial.println("Out of range");
 } else {
  Serial.print(cm);
  Serial.println(" cm ");
 }

 // Wait at least 60ms before next measurement
 delay(60);
}
```

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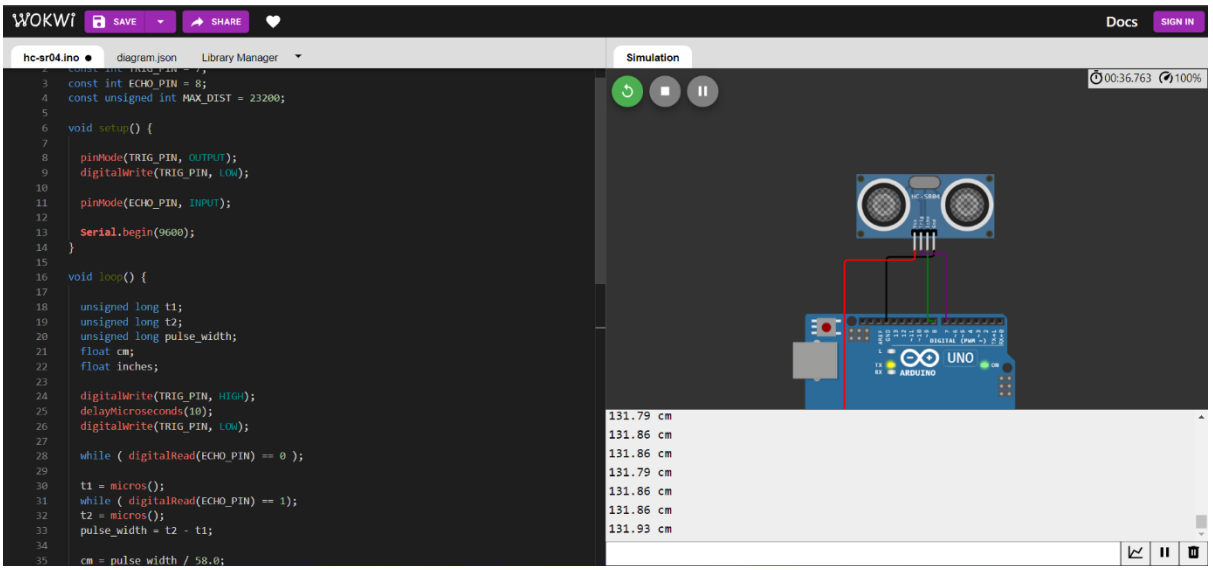


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