KCG COLLEGE OF TECHNOLOGY

Department of Computer Science and Engineering

Assignment 4

Topic : Ultra Sonic Sensor using RPi   **Name**: Yuvanchandru M

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;
      digitalWrite(LED_BUILTIN, isNearby);
      Serial.print("Measured distance: ");
      Serial.println(readDistanceCM());
      delay(100);
}
```

Link: https://wokwi.com/projects/348210025414525522

Screenshots :