Assignment 4

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| Student Name | Ashwin B S |
| Student Register Number | 710719106011 |
| Team ID | PNT2022TMID31438 |
| Maximum Mark | 2 |

#define ECHO\_PIN 2

#define TRIG\_PIN 3

void setup() {

Serial.begin(9600);

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();

if(distance <= 100)

{

Serial.println("person detected ");

}

else{

Serial.print("Measured distance: ");

Serial.println(readDistanceCM());

}

delay(1000);

}

Simulation:

