ASSIGNMENT 4

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Case (i) : Distance < 100cm

```
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                                                                                                                                                                       Docs
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                                                                                                                                                                    Ō00:20.332 €1%
        const int TRIG_PIN = 7;
const int ECHO_PIN = 8;
         // Anything over 400 cm (23200 us pulse) is "out of range" const unsigned int MAX_DIST = 23200;
         void setup() {
                                                                                                                                   E ⊙UNO
           // The Trigger pin will tell the sensor to range find
           pinMode(TRIG_PIN, OUTPUT);
           digitalWrite(TRIG_PIN, LOW);
   14
           //Set Echo pin as input to measure the duration of
           //pulses coming back from the distance sensor pinMode(ECHO_PIN, INPUT);
                                                                                                                                    18
           pinMode(LED, OUTPUT);
                                                                                            Distance: 52.69 cm
           // We'll use the serial monitor to view the sensor output
   22
           Serial.begin(9600);
                                                                                            Distance: 52.76 cm
   23
                                                                                            Distance: 52.76 cm
                                                                                            Distance: 52.69 cm
         void loop() {
                                                                                            Distance: 52.76 cm
   27
           unsigned long t1;
unsigned long t2;
                                                                                            Distance: 52.76 cm
                                                                                            Distance: 52.69 cm
           unsigned long pulse_width;
                                                                                                                                                                           ₩ II 🗖
```

Case (ii): Distance > 100cm

```
₩OKWÎ 🖥 SAVE 🗸 🍌 SHARE
                                                                                                                                                               Docs SIGN UP
 hc-sr04.ino ● diagram.json ● Library Manager ▼
                                                                                          Simulation
                                                                                                                                                            Ō00:39.132 (*)7%
         const int TRIG_PIN = 7;
        const int ECHO_PIN = 8;
        // Anything over 400 cm (23200 us pulse) is "out of range"
        const unsigned int MAX_DIST = 23200;
                                                                                                                            E O UNO
          // The Trigger pin will tell the sensor to range find
pinMode(TRIG_PIN, OUTPUT);
   13
          digitalWrite(TRIG_PIN, LOW);
   16
          //Set Echo pin as input to measure the duration of
          //pulses coming back from the distance sensor
                                                                                                                              1012885 12222
   18
          pinMode(ECHO_PIN, INPUT);
pinMode(LED, OUTPUT);
   20
           // We'll use the serial monitor to view the sensor output
                                                                                       Distance: 202.83 cm
   22
          Serial.begin(9600);
                                                                                       Distance: 202.83 cm
   23
                                                                                       Distance: 202.83 cm
   24
                                                                                       Distance: 202.83 cm
        void loop() {
                                                                                       Distance: 202.83 cm
   26
          unsigned long t1;
                                                                                       Distance: 202.83 cm
          unsigned long t2;
                                                                                       Distance: 202.83 cm
          unsigned long pulse_width;
float cm;
                                                                                                                                                                 ₩ II
```