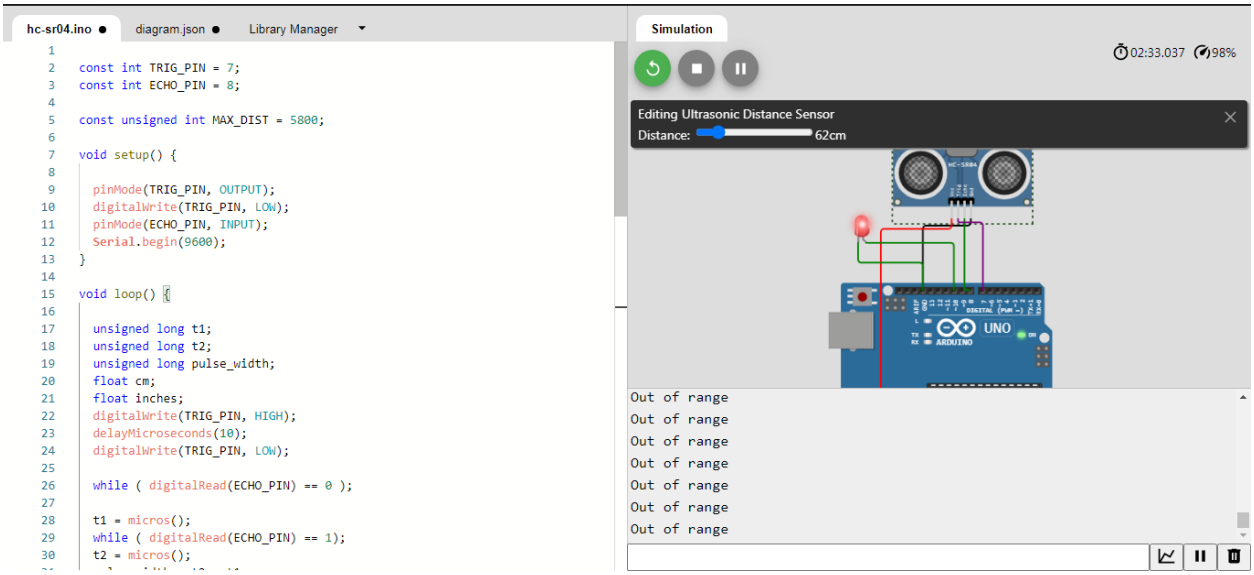
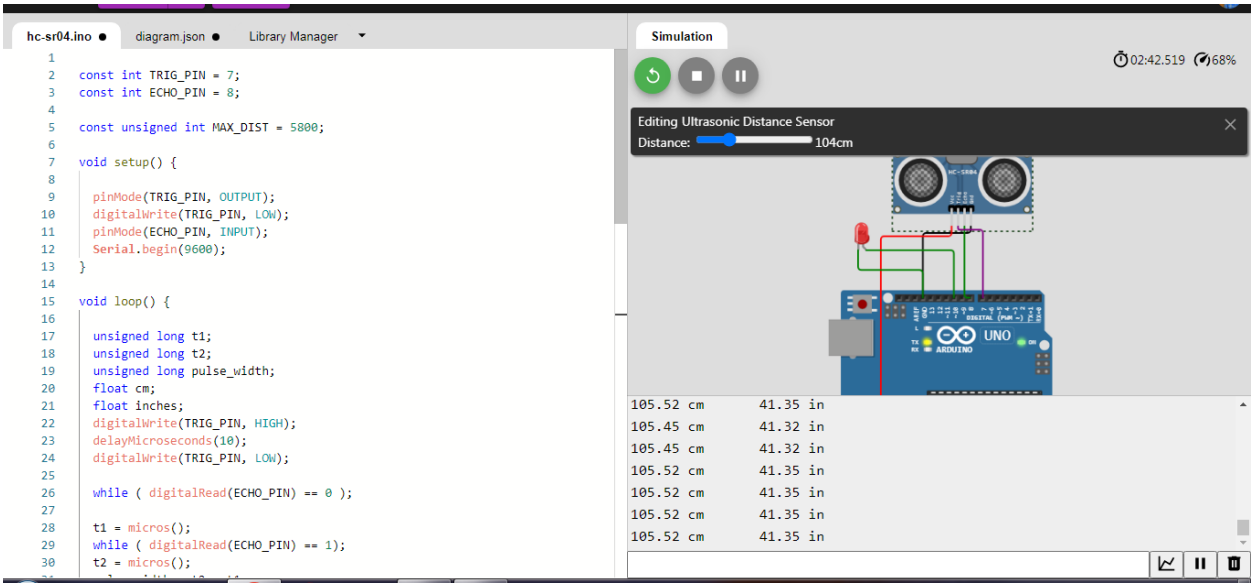
OUTPUT : (LESS THAN 100CM) - LED GLOWS



OUTPUT : (MORE THAN 100CM) - LED DOESN'T GLOW



CODE :

```
const int TRIG_PIN = 7;
const int ECHO_PIN = 8;

const unsigned int MAX_DIST = 5800;

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");
    setup1();
    loop1();
```

```
  } else {
    Serial.print(cm);
    Serial.print(" cm \t");
    Serial.print(inches);
    Serial.println(" in");
  }


  delay(60);
}



void setup1() {
  pinMode(10, OUTPUT); }
void loop1() {
  digitalWrite(10, HIGH);   delay(500);
  digitalWrite(10, LOW);
  delay(500);
}
```