

## EXPERIMENT 02 :Ultra sonic sensor

```
const int trigPin = 9;

const int echoPin = 10;

long duration;

int distance;

void setup() {

    pinMode(trigPin, OUTPUT); // Sets the trigPin as an Output

    pinMode(echoPin, INPUT); // Sets the echoPin as an Input

    Serial.begin(9600); // Starts the serial communication
}

void loop() {

    // Clears the trigPin

    digitalWrite(trigPin, LOW);

    delay(100);

    // Sets the trigPin on HIGH state for 10 micro seconds

    digitalWrite(trigPin, HIGH);

    delay(100);

    digitalWrite(trigPin, LOW);

    duration = pulseIn(echoPin, HIGH);

    // Calculating the distance

    distance = duration * 0.034 / 2;

    // Prints the distance on the Serial Monitor

    Serial.print("Distance: ");

    Serial.println(distance);

}
```

