

```
#include <HCSR04.h>
```

```
int triggerPin = 4;
```

```
int echoPin = 5;
```

```
double duration, distance;
```

```
void setup () {
```

```
    Serial.begin(9600);
```

```
    HCSR04.begin(triggerPin, echoPin);
```

```
    // Extra
```

```
    pinMode(triggerPin, OUTPUT);
```

```
    pinMode(echoPin, INPUT);
```

```
}
```

```
void loop () {
```

```
    // double* distances = HCSR04.measureDistanceCm();
```

```
    distance = 0;
```

```
    for (int i = 0; i < 10; i++){
```

```
        digitalWrite(triggerPin, LOW);
```

```
        delayMicroseconds(2);
```

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

```
        digitalWrite(triggerPin, HIGH);
```

```
        delayMicroseconds(10);
```

```
        digitalWrite(triggerPin, LOW);
```

```
    // Reads the echoPin, returns the sound wave travel  
time in microseconds
```

```
        duration = pulseIn(echoPin, HIGH);
```

```
// Calculating the distance
    distance += duration*0.034/2;
}
distance/=10;
// Clears the trigPin

// Prints the distance on the Serial Monitor
Serial.print("Distance: ");
Serial.println(distance);
// Serial.print("1: ");
// Serial.print(distances[0]);
// Serial.println("cm");
//
    Serial.println("---");
    delay(500);
}
```