

```
1 #include <Arduino.h>
2
3 class uss
4 {
5     private:
6
7
8     public:
9     uint8_t echoPin, triggerPin;
10    uss(uint8_t _echoPin, uint8_t _triggerPin)
11    {
12        pinMode(_echoPin, INPUT);
13        pinMode(_triggerPin, OUTPUT);
14        this->echoPin = _echoPin;
15        this->triggerPin = _triggerPin;
16    }
17
18    //@brief returns the distance in cm
19    int MeasureDistance()
20    {
21        // Clears the trigPin
22        digitalWrite(triggerPin, LOW);
23        delayMicroseconds(2);
24        // Sets the trigPin on HIGH state for 10 micro seconds
25        digitalWrite(triggerPin, HIGH);
26        delayMicroseconds(10);
27        digitalWrite(triggerPin, LOW);
28        // Reads the echoPin, returns the sound wave travel time in
29        // microseconds
30        long duration = pulseIn(echoPin, HIGH);
31        // Calculating the distance
32        int distance = duration * 0.034 / 2;
33        return distance;
34    }
35};
```