FRONT PART OF THE VEHICLE (1ST NODEMCU)

```
#include<dht.h>
dht DHT;
#define DHT11_PIN D7
const int trigPin = D2;
const int echoPin = D3;
int buzz= D4;
long duration;
int distance;
void setup() {
 Serial.begin(9600);
 pinMode(D0, INPUT);
 pinMode(D1, OUTPUT);
 pinMode(trigPin, OUTPUT); // Sets the trigPin as an Output
pinMode(echoPin, INPUT); // Sets the echoPin as an Input
pinMode(buzz,OUTPUT);
 }
// the loop routine runs over and over again forever:
void loop() {
 // Clears the trigPin
digitalWrite(trigPin, LOW);
delayMicroseconds(2);
// Sets the trigPin on HIGH state for 10 micro seconds
digitalWrite(trigPin, HIGH);
delayMicroseconds(10);
digitalWrite(trigPin, LOW);
// Reads the echoPin, returns the sound wave travel time in microseconds
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);
 if (distance<9)
 {
digitalWrite(D4, HIGH);
 }
 else
 {
digitalWrite(D4, LOW);
 }
 delay(1000);
 int a = digitalRead(D0);
 Serial.println(a);
 if (a==1)
 {
```

```
                                        else
                                        {
                                        digitalWrite(D1, LOW);   }
                                        delay(500);
 digitalWrite(D1, HIGH);
}
```

```
int chk = DHT.read11(DHT11_PIN);
Serial.println(" Humidity " );
Serial.println(DHT.humidity, 1);
Serial.println(" Temparature ");
Serial.println(DHT.temperature, 1);
delay(2000);
 }
```

BACK PART OF THE VEHICLE (2ND NODEMCU)

```
// defines pins numbers
const int trigPin = D0;
const int echoPin = D1;
int soundSensor=A0;
int LED=D4;
boolean LEDStatus=false;
int vibr_pin=D3;
int LED_Pin=D8;
int green=D5;
int yellow=D6;
int buzz= D2;// for buzzer
// defines variables
long duration;
int distance;
void setup() {
pinMode(trigPin, OUTPUT); // Sets the trigPin as an Output
pinMode(echoPin, INPUT); // Sets the echoPin as an Input
pinMode(buzz,OUTPUT);
pinMode(soundSensor,INPUT);
 pinMode(LED,OUTPUT);
 pinMode(vibr_pin,INPUT);
 pinMode(LED_Pin,OUTPUT);
 pinMode(green,OUTPUT);
```

```
 pinMode(yellow,OUTPUT);
Serial.begin(9600); // Starts the serial communication
 }
void loop() {
 int SensorData=analogRead(soundSensor);
 Serial.println(SensorData);
 if(SensorData>548){

                                    digitalWrite(LED,LOW);   }
                                    }
                                    delay(500);
                                   int val;
 if(LEDStatus==false){              val=digitalRead(vibr_pin);
LEDStatus=true;                   Serial.println(val);
 digitalWrite(LED,HIGH);   }       if(val==1)
 else{
 LEDStatus=false;


 { digitalWrite(LED_Pin,HIGH); delay(500);// digitalWrite(LED_Pin,LOW); delay(1000);
 }
 else
 digitalWrite(LED_Pin,LOW);
// Clears the trigPin
digitalWrite(trigPin, LOW);
delayMicroseconds(2);
// Sets the trigPin on HIGH state for 10 micro seconds
digitalWrite(trigPin, HIGH);
delayMicroseconds(10);
digitalWrite(trigPin, LOW);
// Reads the echoPin, returns the sound wave travel time in microseconds
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);
if (distance<=30)
{
digitalWrite(D2, HIGH);
digitalWrite(green,LOW);
digitalWrite(yellow,LOW);
}
else
{
digitalWrite(green,HIGH);
digitalWrite(yellow,LOW);
digitalWrite(D2, LOW);
}
if(distance>30&&distance<80)
{




digitalWrite(green,LOW);  digitalWrite(D2, LOW);  digitalWrite(yellow,HIGH);   }
delay(1000);
}
```