

```

int trigPin = 3;    //Right Ultrasonic Sensor
int echoPin = 2;
long duration, distance ;
#define R_sensor 8

int trigPin2 = 4;   //Left Ultrasonic Sensor
int echoPin2 = 5;
long duration2, distance2 ;
#define L_sensor 9

//##### CLASS begin #####

class A //.....Code for Right Ultrasonic Sensor.....
{
  public:

    void f() {
      digitalWrite(trigPin, LOW);
      delayMicroseconds(5);
      digitalWrite(trigPin, HIGH);
      delayMicroseconds(10);
      digitalWrite(trigPin, LOW);

      pinMode(echoPin, INPUT);
      duration = pulseIn(echoPin, HIGH);

      // convert the time into a distance
      distance = (duration/2) / 29.1;

      Serial.print("Distance Right: ");
      Serial.print(distance);
      Serial.print("cm      ");

    } //end of void f
};
//.....end of class A.....

class B //.....Code for Left Ultrasonic Sensor.....
{
  public:

    void f() {
      digitalWrite(trigPin2, LOW);
      delayMicroseconds(5);
      digitalWrite(trigPin2, HIGH);
      delayMicroseconds(10);
      digitalWrite(trigPin2, LOW);

      pinMode(echoPin2, INPUT);
      duration2 = pulseIn(echoPin2, HIGH);

      // convert the time into a distance
      distance2 = (duration2/2) / 29.1;

      Serial.print("Distance Left: ");
      Serial.print(distance2);
      Serial.println("cm      ");
    } //end of void f
};
//.....end of class B.....

// Method for call class
A *a;
B *b;

```

```

void setup()      // main function
{
    a=new A();
    b=new B();

    Serial.begin (9600);

    pinMode(trigPin, OUTPUT);
    pinMode(echoPin, INPUT);
    pinMode(R_sensor, OUTPUT);

    pinMode(trigPin2, OUTPUT);
    pinMode(echoPin2, INPUT);
    pinMode(L_sensor, OUTPUT);

    pinMode(22, OUTPUT); //Center LED
    pinMode(42, OUTPUT); //Right LED
    pinMode(44, OUTPUT); //Left LED
}

void loop()      //Continues loop
{

    b->f();
    a->f();
    digitalWrite(22,HIGH); // ON Green LED

    //.....Right Side LED+Sensor.....
    if(distance<=25 && distance>0)
    {Right(200);
    digitalWrite(42,HIGH);
    }
    else if(distance<=50 && distance>25)
    {Right(500);
    digitalWrite(42,HIGH);
    }
    else if(distance<=100 && distance>50)
    {Right(1000);
    digitalWrite(42,HIGH);
    }
    else{digitalWrite(8,LOW);
    digitalWrite(42,LOW);
    }

    //.....Left Side LED+Sensor.....
    if(distance2<=25 && distance2>0)
    {Left(200);
    digitalWrite(44,HIGH);
    }
    else if(distance2<=50 && distance2>25)
    {Left(500);
    digitalWrite(44,HIGH);
    }
    else if(distance2<=100 && distance2>50)
    {Left(1000);
    digitalWrite(44,HIGH);
    }
    else{digitalWrite(9,LOW);
    digitalWrite(44,LOW);
    }

} //.....End of loop.....

```

```
void Right (int interval){
    static long prevMill = 0;
    if (((long)millis() - prevMill) >= interval){
        prevMill = millis();
        digitalWrite(R_sensor, !digitalRead(R_sensor));
    }
}

void Left (int interval){
    static long prevMill = 0;
    if ((millis() - prevMill) >= interval){
        prevMill = millis();
        digitalWrite(L_sensor, !digitalRead(L_sensor));
    }
}
//.....END of Programme.....
```