Three Ultrasonic Sensors Code::::::::

// Define sensor pins

const int trigPin1 = 2; // Trig pin of sensor 1

const int echoPin1 = 3; // Echo pin of sensor 1

const int trigPin2 = 4; // Trig pin of sensor 2

const int echoPin2 = 5; // Echo pin of sensor 2

const int trigPin3 = 6; // Trig pin of sensor 3

const int echoPin3 = 7; // Echo pin of sensor 3

// Define LED pin

const int ledPin = 13; // LED pin

void setup() {

Serial.begin(9600);

// Ultrasonic sensor pins

pinMode(trigPin1, OUTPUT);

pinMode(echoPin1, INPUT);

pinMode(trigPin2, OUTPUT);

pinMode(echoPin2, INPUT);

pinMode(trigPin3, OUTPUT);

pinMode(echoPin3, INPUT);

// LED pin

pinMode(ledPin, OUTPUT);

}

void loop() {

// Function to measure distance using ultrasonic sensor

int distance1 = measureDistance(trigPin1, echoPin1);

int distance2 = measureDistance(trigPin2, echoPin2);

int distance3 = measureDistance(trigPin3, echoPin3);

// Check if any sensor detects an obstacle within a specific range

if (distance1 < 20 || distance2 < 20 || distance3 < 20) {

digitalWrite(ledPin, HIGH); // Turn on LED

} else {

digitalWrite(ledPin, LOW); // Turn off LED

}

// Print distance readings

Serial.print("Distance 1: ");

Serial.print(distance1);

Serial.print(" cm\tDistance 2: ");

Serial.print(distance2);

Serial.print(" cm\tDistance 3: ");

Serial.print(distance3);

Serial.println(" cm");

delay(500); // Delay for stability

}

// Function to measure distance using ultrasonic sensor

int measureDistance(int trigPin, int echoPin) {

digitalWrite(trigPin, LOW);

delayMicroseconds(2);

digitalWrite(trigPin, HIGH);

delayMicroseconds(10);

digitalWrite(trigPin, LOW);

long duration = pulseIn(echoPin, HIGH);

int distance = duration \* 0.034 / 2; // Calculate distance in cm

return distance;

}