#include <Servo.h>

Int dist = 0;

Long readUltrasonicDistance(int triggerPin, int echoPin)

{

pinMode(triggerPin, OUTPUT); // Clear the trigger

digitalWrite(triggerPin, LOW);

delayMicroseconds(2);

// Sets the trigger pin to HIGH state for 10 microseconds

digitalWrite(triggerPin, HIGH);

delayMicroseconds(10);

digitalWrite(triggerPin, LOW);

pinMode(echoPin, INPUT);

// Reads the echo pin, and returns the sound wave travel time in microseconds

Return pulseIn(echoPin, HIGH);

}

Servo servo\_6;

Void setup()

{

Servo\_6.attach(6, 500, 2500);

pinMode(2, INPUT);

pinMode(13, OUTPUT);

pinMode(A0, INPUT);

pinMode(9, OUTPUT);

}

Void loop()

{

Dist = 0.01723 \* readUltrasonicDistance(7, 7);

If (dist <= 100) {

Servo\_6.write(90);

Delay(1000); // Wait for 1000 millisecond(s)

} else {

Servo\_6.write(0);

Delay(1000); // Wait for 1000 millisecond(s)

}

If (digitalRead(2) == 1) {

digitalWrite(13, HIGH);

delay(1000); // Wait for 1000 millisecond(s)

} else {

digitalWrite(13, LOW);

delay(1000); // Wait for 1000 millisecond(s)

}

If (analogRead(A0) > 200) {

digitalWrite(9, HIGH);

delay(1000); // Wait for 1000 millisecond(s)

} else {

digitalWrite(9, LOW);

delay(1000); // Wait for 1000 millisecond(s)

}

}