**PIR MOTION SENSOR WITH ARDUINO AND BURZER**

int pir = 7;

int buzz = 6;

void setup() {

// put your setup code here, to run once:

pinMode(pir, INPUT);

pinMode(buzz, OUTPUT);

}

void loop() {

// put your main code here, to run repeatedly:

int sensorvalue = digitalRead(pir);

if(sensorvalue==1){

digitalWrite(buzz,HIGH);

}

else digitalWrite(buzz, LOW);

}

**ANALOG VALUE INPUT MOTION SENSOR**

const int motionpin=A0;  
const int ledpin=13;  
const int buzzpin=12; // ledpin,motionpin and buzpin are not changed throughout the process  
int motionsensvalue=0;  
void setup() {  
// put your setup code here, to run once:  
Serial.begin(9600);  
pinMode(ledpin, OUTPUT);  
pinMode(motionpin,INPUT);  
pinMode(buzzpin,OUTPUT);  
}  
void loop() {  
// put your main code here, to run repeatedly:  
motionsensvalue=analogRead(motionpin); // reads analog data from motion sensor  
if (motionsensvalue>=200){  
digitalWrite(ledpin,HIGH);  
tone(buzzpin,100); //turns on led and buzzer  
}  
else {  
digitalWrite(ledpin,LOW); //turns led off led and buzzer  
noTone(buzzpin);  
}  
}

**ULTRA SONIC SENSOR SETUP WITH 2 LED PROJECT**

#define trigPin 13

#define echoPin 12

#define led 11

#define led2 10

void setup() {

Serial.begin (9600);

pinMode(trigPin, OUTPUT);

pinMode(echoPin, INPUT);

pinMode(led, OUTPUT);

pinMode(led2, OUTPUT);

}

void loop() {

long duration, distance;

digitalWrite(trigPin, LOW);

delayMicroseconds(2);

digitalWrite(trigPin, HIGH);

delayMicroseconds(10);

digitalWrite(trigPin, LOW);

duration = pulseIn(echoPin, HIGH);

distance = (duration/2) / 29.1;

if (distance < 100) {

digitalWrite(led,HIGH);

digitalWrite(led2,LOW);

}

else {

digitalWrite(led,LOW);

digitalWrite(led2,HIGH);

}

if (distance >= 400 || distance <= 0){

Serial.println("Out of range");

}

else {

Serial.print(distance);

Serial.println(" cm");

}

delay(100);

}