



CODE:

```
int trigPin=8;
int echoPin=9;
int buzzer=10;
int motion= 7;
long duration;
float distanceInch;
int timer;
void setup()
{
  pinMode(8,OUTPUT);
  pinMode(9,INPUT);
  pinMode(7,INPUT);
  pinMode(4,OUTPUT);
  pinMode(10,OUTPUT);
  Serial.begin(9600);
}
void loop()
{
  digitalWrite(trigPin,LOW);
  delayMicroseconds(1000);
  digitalWrite(trigPin,HIGH);
  delayMicroseconds(1000);
  digitalWrite(trigPin,LOW);
  duration= pulseIn(echoPin,HIGH);
  distanceInch= duration*0.0133/2;
```

```
if(distanceInch<=50)
{
digitalWrite(buzzer,HIGH);
}
else
{
digitalWrite(buzzer,LOW);
}

//motion detector

int m=digitalRead(7);
Serial.print("motion detected:");
Serial.println(m);
if (m==1)
{Serial.println("yes");
digitalWrite(4,HIGH);
}
else
{Serial.println("no");
digitalWrite(4,LOW);
}
}
```