



CODIGO ALARMA DE PROXIMIDAD CON AVISO LED Y SONORO

//Codigo programado por ANTONIO REQUENA QUESADA

int distancia = 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);

return pulseIn(echoPin, HIGH);

}

void setup()

{

Serial.begin(9600);

pinMode(11, OUTPUT);

pinMode(13, OUTPUT);

pinMode(10, OUTPUT);

pinMode(9, OUTPUT);

}

```
void loop()
{
  distancia = 0.01723 * readUltrasonicDistance(5, 3);
  Serial.println(distancia);
  if (distancia < 10) {
    digitalWrite(11, HIGH);
    tone(13, 570, 300); // play tone 60 (C5 = 523 Hz)
  } else {
    digitalWrite(11, LOW);
  }
  if (distancia > 10 && distancia <= 100) {
    digitalWrite(10, HIGH);
  } else {
    digitalWrite(10, LOW);
  }
  if (distancia > 100 && distancia <= 200) {
    digitalWrite(9, HIGH);
  } else {
    digitalWrite(9, LOW);
  }
  delay(10);
}
```