void setup() {

pinMode(A0, INPUT);

pinMode(A1, INPUT);

pinMode(8, OUTPUT);

pinMode(A4, INPUT);

pinMode(A5, OUTPUT);

}

void loop() {

int val1 = 0;

int val2 = 0;

int val3 = 0;

int val4 = 0;

int val5 = 0;

int val6 = 0;

int val7 = 0;

int val8 = 0;

int val9 = 0;

int val10 = 0;

int sumval = 0;

int impuls = 100; //длина импульса подобрать взависимости от частоты

int zaderjka = 0;

int basa = 0;

zaderjka = analogRead(A4);

pinMode(A0, OUTPUT);

digitalWrite(A0, LOW);

pinMode(A0, INPUT);

digitalWrite(8,HIGH);

delayMicroseconds(impuls);

digitalWrite(8, LOW);

delayMicroseconds(zaderjka);

val1 = analogRead(A0);

digitalWrite(8,HIGH);

delayMicroseconds(impuls);

digitalWrite(8, LOW);

delayMicroseconds(zaderjka);

val2 = analogRead(A0);

digitalWrite(8,HIGH);

delayMicroseconds(impuls);

digitalWrite(8, LOW);

delayMicroseconds(zaderjka);

val3 = analogRead(A0);

digitalWrite(8,HIGH);

delayMicroseconds(impuls);

digitalWrite(8, LOW);

delayMicroseconds(zaderjka);

val4 = analogRead(A0);

digitalWrite(8,HIGH);

delayMicroseconds(impuls);

digitalWrite(8, LOW);

delayMicroseconds(zaderjka);

val5 = analogRead(A0);

digitalWrite(8,HIGH);

delayMicroseconds(impuls);

digitalWrite(8, LOW);

delayMicroseconds(zaderjka);

val6 = analogRead(A0);

digitalWrite(8,HIGH);

delayMicroseconds(impuls);

digitalWrite(8, LOW);

delayMicroseconds(zaderjka);

val7 = analogRead(A0);

digitalWrite(8,HIGH);

delayMicroseconds(impuls);

digitalWrite(8, LOW);

delayMicroseconds(zaderjka);

val8 = analogRead(A0);

digitalWrite(8,HIGH);

delayMicroseconds(impuls);

digitalWrite(8, LOW);

delayMicroseconds(zaderjka);

val9 = analogRead(A0);

digitalWrite(8,HIGH);

delayMicroseconds(impuls);

digitalWrite(8, LOW);

delayMicroseconds(zaderjka);

val10 = analogRead(A0);

sumval = val1 + val2 + val3 + val4 + val5 + val6 + val7 + val8 + val9 + val10;

sumval = sumval/5;

basa = analogRead(A1);

if (sumval > basa)

{tone(A5,1000);

delay(50);

noTone(A5);

}

else {delay(50);

}

}