LAMPIRAN

Coding program PWM Arduino:

```
#include <avr/io.h>
#include <avr/interrupt.h>
unsigned long frequency = 40000 ;
void setup()
{
pinMode(9, 1);
pinMode(10,1);\
DFG(frequency);
Serial.begin(57600);
}
void loop() {
}
void DFG (unsigned long tempfreq){
  cli();//disable interupts
  TCCR1A = 0;
  TCCR1B = 0;
  TCNT1 = 0;
  TCCR1A |=_BV(COM1A0) + _BV(COM1B0);
  TCCR1B |=_BV(WGM12);
  TCCR1C = _BV(FOC1A);
  if(tempfreq > 122 && tempfreq < 1000001){
    OCR1A = (8000000/tempfreq)-1;
    TCCR1B |=_BV(CS10);
  }
  else if(tempfreq<=122 && tempfreq >15){
    OCR1A = (1000000/tempfreq)-1;
    TCCR1B |=_BV(CS11);
  }
  else if (tempfreq <= 15 && tempfreq > 4){
    OCR1A = (125000/tempfreq)-1;
    TCCR1B |=_BV(CS10)+_BV(CS11);
  }
}
```