C Code

```
/*
 * xlab8_pt2.c
 *
 * Created: 6/5/2565 18:15:15
 * Author : ASAS
 */

#include <avr/io.h>
#include <avr/interrupt.h>
#define F_CPU 16000000UL


void ADC_init(void)
{
	ADCSRA = (1<<ADEN)|(1<<ADPS2)|(1<<ADPS1)|(1<<ADPS0); //ADC Enable and Prescale 128
	ADCSRA |= (1<<ADATE)|(1<<ADIF); //Trigger EN and set Interrupt
	ADMUX = (1<<REFS0); // set ref selection bits AVCC pin
	ADCSRA |= (1<<ADSC); // Start ADC Conversion

}
int main(void)
{
	DDRD=0xFF; // PORT D IS OUTPUT
	DDRC=0x00; // PORT C IS INPUT
	ADC_init(); // call func
	TCNT0=134; // initial value for delay 1 ms
	TCCR0A=0x00;
	TCCR0B=(1<<CS00)|(1<<CS02); // prescale 1024
	TIMSK0=(1<<TOIE0); // Interrupt timer OV EN
	sei(); // set interrupt
 while(1); // loop
	return 0;
}

ISR(TIMER0_OVF_vect)
{
	TCNT0=134; // initial value
	ADCSRA |= (1<<ADSC); // conversion EN
	while((ADCSRA&(1<<ADIF))==0); // condition
	PORTD=(ADC>>2); // shift 2 bit
}
```