

```
//Batch:-C2
//Name:- Pratik yadav
//Roll no:- 213030
//PRN no:- 22310856
//EXPT- 8 AVR + Motor driver interfacing

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

void motorControl()
{
    int i=0;
    OCR0=0;
    _delay_ms(300);
    //Gradually increase speed (0% to 100%)
    for (i=25; i<=225; i+=25)
    {
        OCR0 = i;
        _delay_ms(300);
    }
    //Gradually decrease speed (100% to 0%)
    for (i=255; i>=0; i-=25)
    {
        OCR0 = i;
        _delay_ms(300);
    }
}

int main()
{
    DDRB |= (1<< PB3) | (1<< PB4); //Set PB3(OC0) and PB4 as output
    TCCR0 = 0XEB; //fast PWM Mode., Non-inverting mode, Prescaler 64- 11101011

    while (1)
    {
        PORTB &= ~(1<< PB4); // Set IN2 Low forward direction
        motorControl();
        _delay_ms(100);

        PORTB |= (1<<PB4);
        motorControl();
        _delay_ms(100);
    }
}
```