```
;>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
;1DT301, Computer Technology I
;Date: 2019-10-11
;
;Author:
;   Student name 1:        Einar van de Velde
;   Student name 2:        Abdulla Mehdi
;
;Lab number:               4.
;Title:                    Task 3.
;
;Hardware:                 STK600, CPU ATmega2560.
;
;Function:                 Display an ASCII character on LEDs via input
;                          from serial connection using polling.
;
;Input ports:              URAT0.
;
;Output ports:             PORTB.
;
;Subroutines:              None.
;
;Included files:           m2560def.inc
;
;Other information:
;Changes in program:
;       File Created (2019-10-11)
;               Program is runnable (2019-10-11)
;
;<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
.include"m2560def.inc"

.CSEG
.org 0x0000
rjmp START

.org OVF0ADDR
jmp TIMER_INTERRUPT

.org 0x72

;-------------------------------------------------------;
START:
        ldi r20, HIGH(RAMEND)           ; Load Immediate
        out SPH, r20
        ldi r20, LOW(RAMEND)
        out SPL, r20

        ldi r16, 0x01
```

```asm
        out DDRB, r16

        ldi r21, 0b00000101
        out TCCR0B, r21

        ldi r21, (1<<TOIE0)
        sts TIMSK0, r21                 ; Store Direct To SRAM

        ldi r21, 240
        out TCNT0, r21

    sei                                 ; Enable Global Interrupts
    ser r17                             ; Set Register 17
        out DDRB, r17

        ldi r18, 0

;-------------------------------------------------------;
LOOP:
        nop                             ; No Operation
rjmp LOOP

TIMER_INTERRUPT:
        com r17                         ; Ones Compliment
        out PORTB, r17
reti                                    ; Interrupt Return
```