```
;
; lab 5
;


.cseg

        ldi ZH,high(msg<<1)       ; initialize index register Z to point to msg in flash memory
        ldi ZL,low(msg<<1) ;Why msg<<1? Because it is word address, each word is 2 bytes, therefore
                          ;word_address * 2 -> byte address. Recall, in decimal, 12 * 10
                                      ;can be done by shift each digit left by one digit, we get
120.
                                      ;In binary, 0b01 * 2 can be done by shift each bit left by
one digit, we get 0b10

        ;write you code here, initialize index register X to point to msg_copy in SRAM

        ldi r16, -1               ;initialize counter to -1

next_char:
        ;write you code here
        ;write a loop, copy each character from flash memory to at msg_copy in SRAM
        ;get the length of the string, store it at str_len in SRAM



done:   jmp done

msg: .db "Hello, world!", 0 ; c-string format

.dseg
.org 0x200
msg_copy: .byte 14
str_len: .byte 1
```