

; Uppercase to lowercase

```
ASSUME CS:CODE,DS:DATA
DATA SEGMENT
    msg1 DB 0AH, 0DH, "Enter string: $"
    str DB 50 DUP("$")
DATA ENDS

CODE SEGMENT
start:
    MOV AX, DATA
    MOV DS, AX

    LEA DX, msg1
    MOV AH, 09H
    INT 21H

    LEA SI, str
    MOV CX, 0000H
    MOV AH, 01H
L1:
    INT 21H
    MOV [SI], AL
    INC SI
    INC CX
    CMP AL, 0DH
    JNZ L1
DEC CX
LEA SI, str
MOV AH, 02H
loop1:
    MOV DL, [SI]
    CMP DL, 61H
    JGE islower
    CMP DL, 20H
    JZ islower
    ADD DL, 20H
    islower:
        INT 21H
        INC SI
        LOOP loop1

    MOV AH, 4CH
    INT 21H
CODE ENDS
END START
```

; search for char in string

ASSUME CS:CODE, DS:DATA

DATA SEGMENT

mesg1 DB 0AH,0DH,"Enter string: \$"

mesg2 DB 0AH,0DH,"Character found\$"

mesg3 DB 0AH,0DH,"Character not found\$"

mesg4 DB 0AH,0DH,"Enter character to search: \$"

str DB 50 DUP("\$")

DATA ENDS

CODE SEGMENT

start:

MOV AX,DATA

MOV DS,AX

LEA DX,mesg1

MOV AH,09H

INT 21H

LEA SI,str

L1:

MOV AH,01H

INT 21H

MOV [SI],AL

INC SI

CMP AL,0DH

JNZ L1

LEA DX,mesg4

MOV AH,09H

INT 21H

MOV AH,01H

INT 21H

LEA SI,str

print:

CMP AL,[SI]

JZ success

INC SI

LOOP *print*

fail:

LEA DX,mesg3

MOV AH,09H

INT 21H

JMP *stop*

success:

LEA DX,mesg2

MOV AH,09H

INT 21H

stop:

MOV AH,4CH

INT 21H

CODE ENDS

END START