

• MODEL SMALL

; MACRO TO DISPLAY THE MESSAGE

DISPLAY MACRO MSG

LEA DX, MSG

MOV AH, 09H

INT 21H

ENDM

• DATA

LIST DB 01H, 05H, 07H, 10H, 12H, 14H

NUMBER EQU (\$-LIST)

KEY DB 011H

MSG1 DB 0DH, 0AH, "ELEMENT FOUND IN THE LIST...\$"

MSG2 DB 0DH, 0AH, "SEARCH FAILED! ELEMENT NOT FOUND \$"

• CODE

~~START~~ START: MOV AX, @DATA

MOV DS, AX

MOV CH, NUMBER-1

MOV CL, 0DH

AGAIN: MOV SI, OFFSET LIST

XOR AX, AX

CMP CL, CH

JE NEXT

JNC FAILED

NEXT: MOV AL, CL

ADD AL, CH

SHR AL, 01H

MOV BL, AL

XOR AH, AH

MOV BP, AX

MOV AL, DS:[BP][SI]

CMP AL, KEY

```
JE SUCCESS
JC INCLOW
MOV CH, BL
DEC CH
JMP AGAIN
INCLOW : MOV CL, BL
        INC CL
        JMP AGAIN
SUCCESS : DISPLAY MSG1
        JMP FINAL
FAILED : DISPLAY MSG2
FINAL : MOV AH, 4CH
        INT 21H
END START
```