

Model Small

; Macro to display 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 012h

msg1 db ~~00h~~^{0dh}, 0ah, "Element found in the list.. \$"

msg2 db ~~00h~~^{0dh}, 0ah, "Search failed! \$"

CODE 0dh \rightarrow '50dh' no.0

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

JE INC
JNC FAILED.

NEXT: MOV AL, CL

ADD AL, CH

SHR AL, 01H ; Divide by 2

MOV BL, AL

XOR AH, AH , clear AH.

MOV BP, AX :

MOV AL, DS:[BP][SI]

CMP AL, KEY ; compare key and CA

JE SUCCESS

JE INLOW

MOV CH, BL

DEC CH

JMP AGAIN.

Signature.....

INCLOW : MOV CL, BL

INC CL

JMP AGAIN

SUCCESS: DISPLAY MSG 1

JMP FINAL

FAILED: DISPLAY MSG 2

FINAL : MOV AH, 4CH

INT 21H

END START.