

Lab Program - 1

. 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 (8 - LIST)

KEY DB 012H

MSG1 DB 0DH, 0AH, "Element Found In The list."

MSG2 DB 0DH, 0AH, "Search Failed!! Element not found"

. CODE

START: MOV AX, @DATA

MOV DS, AX

MOV CH, NUMBER - 1; High Value

MOV CL, 00H; Low Value

Date :

AGAIN: MOV SI, OFFSET LIST

XOR AX, AX

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]

CMR AL, KEY

; Compare Key & A[SI]

JE SUCCESS

JC INCLW

MOV CH, BL

DEC CH

JMP AGAIN

INCLW : MOV CL, BL

INC CL

SUCCESS : DISPLAY MSG1

JMP FINAL

FAILED : DISPLAY MSG2

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FINAL: MOV AH, 4CH

INT 21H

END START







