

Binary Search Program - 1

• MODEL SMALL

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 10H

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

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

• CODE

START: MOV AX, @DATA

MOV DS, AX

MOV CH, NUMBER-1

MOV CL, 00H

AGAIN: MOV SI, OFFSET LIST

XOR AX, AX

CMP CL, CH

JE NEXT

JNC FAILED

Teacher's Signature : _____

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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

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