LAB 1

```
. MODEL SMALL
DISPLAY MACRO MSG
    LEA Dx, MSG
    MOV AH, 09H
    INT 21 H
ENDM


, DATA
LIST DB 01H, 05H, 07H, 10H, 12H, 14
NUMBER EQU ($ - LIST)
KEY DB 10H
MSG 1 DB 0DH, 0AH
MSG1 DB 0DH, 0AH, "SEARCH FAILED | ELEMENT
MSG1 DB 0DH, 0AH, "ELEMENT FOUND IN THE LIST $"
MSG2 DB 0DH, 0AH, "ELEMENT NOT FOUND IN LIST$"


. 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, 00H
        MOV JE NEXT
ALG     JNC FAILED


NEXT:
        MOV  AL, CL
        ADD  AL, C#H
        SHR  AL, 01H
        MOV  BH, AH
        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 MSS.2

JMP FINAL

FAILED :

. DISPLAY MSG II 2

~~JMP~~ ~~FINAL~~

FINAL :

MOV AH, 4CH

INT 21H

END