```
.model SMALL
; MACRO DISPLAY THE MESSAGE
DISPLAY  MACRO  MSG
         LEA   DX, MSG
         MOV   AH, 09H
         INT   21H
END M.


. DATA
LIST  DB 01H, 05H, 07H, 10H, 12H, 14H
NUMBER EQU ($-LIST)
 KEY  DB  012H
MSG1  DB  0DH, 0AH, " ELEMENT  FOUND  IN THE 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
NEXT: MOV AL, CL
      ADD AL, CH
      SHR AL, 01H
      MOV BL, AL
```

```
            CMP    AL, KEY
            JE   SUCCESS
            JC   INCLOW
            MOV  CH, BL
            DEC  CH
            JMP  AGAIN
INCLOW :  MOV  CL, BL
            INC  AL
            JMP  AGAIN
SUCCESS : DISPLAY MSG1
            JMP  FINAL
FAILED DISPLAY MSG2
FINAL : MOV  AH, 4CH
```