```
include "emu8086.inc"
 1
 2
    .model small
 3
     .stack 100h
 4
 5
     .data
 6
         inputArray db 15,3,2,2,1,6,12
 7
         outputArray db 6 dup(?)
     .code
 8
 9
10
    main proc
11
         mov ax,@data
12
         mov ds, ax
13
14
         CALL SCAN NUM ; CX contains range input
15
16
         ;initializaion
17
         mov si, 0
18
         mov bh,1
19
         mov di, 0
20
         inc cl
21
         mov ah, 0
22
23
         11:
24
             cmp bh,cl
25
             jz mid
26
             mov al,inputArray[si]
27
             cmp al,bh
28
             jz found
                               ; if found, then straight start with new search
29
             inc si
30
             cmp si,7
31
             jz notFound
                               ; if not found, then append
32
                               ;it into the outputArray
33
             jmp 11
34
35
         found:
36
             mov si, 0
37
             inc bh
38
             jmp 11
39
40
         notFound:
41
             mov outputArray[di],bh
42
             inc di
43
             jmp 11
44
45
          mid:
                               ; this segment is to show the output
46
             mov outputArray[di],'$'
47
             mov di, 0
48
             CALL PTHIS
49
50
             db 13, 10, 'Missing values are : ', 0
51
52
                 mov al,outputArray[di]
53
                 cmp al,'$'
54
                 jz end
55
                 CALL PTHIS
56
                 db ' ', 0
                 CALL PRINT NUM
57
58
                  inc di
59
                  jmp 12
60
61
          end:
62
             DEFINE SCAN NUM
63
             DEFINE PRINT NUM
64
             DEFINE PRINT NUM UNS
65
             DEFINE_PTHIS
66
             hlt
67
68
   endp main
69
     end main
```