```asm
1    include "emu8086.inc"
2    .model small
3    .stack 100h
4    .data
5        ;initializing 3*3 matrix
6        matrix db 1,2,3  ; row sum = 6  ;col sum = 12
7               db 4,5,6  ; row sum = 15 ;col sum = 15
8               db 7,8,9  ; row sum = 24 ;col sum = 18
9    .code
10   main proc
11           mov ax,@data
12           mov ds,ax
13
14           ;initialization
15
16           mov ax,0
17           mov si,0
18           mov di,3
19
20           row:
21               mov bl,matrix[si]
22               add al,bl
23               inc si
24               cmp si,10
25               jz mid
26               cmp si,di
27               jz result
28               jmp row
29
30           result:
31               CALL PTHIS
32               db 13, 10, 'Row Sum : ', 0
33               CALL PRINT_NUM
34               mov ax,0
35               add di,3
36               jmp row
37
38           ;column sum start from here
39           mid:
40               mov ax,0
41               mov si,0
42               mov di,6
43               mov cx,0
44
45           col:
46               mov bl,matrix[si]
47               add al,bl
48               cmp si,8
49               ja end
50               cmp si,di
51               jz colResult
52               add si,3
53               jmp col
54
55           colResult:
56               CALL PTHIS
57               db 13, 10, 'Column Sum : ', 0
58               CALL PRINT_NUM
59               mov ax,0
60               inc di
61               inc cx
62               mov si,cx
63               jmp col
64
65           DEFINE_PTHIS
66           DEFINE_PRINT_NUM
67           DEFINE_PRINT_NUM_UNS
68
69           end:
70               hlt
71
72   endp main
73   end main
```