

# ASCII TO BCD OPERATIONS

**INPUT:AL=37H**

**NAME:K.SUDARSHAN**

**OUTPUT:AL=07H**

**ROLL NO:20G01A0454**

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DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Progra...
File View Run Breakpoints Data Options Window Help READY
[CPU 80486] 1=[↑][↓]
cs:0000 BE0020 mov si,2000 ax 0007 c=0
cs:0003 8A04 mov al,[si] bx 0000 z=0
cs:0005 240F and al,0F cx 0000 s=0
cs:0007 CC int 03 dx 0000 o=0
cs:0008 0000 add [bx+si],al si 2000 p=0
cs:000A 0000 add [bx+si],al di 0000 a=0
cs:000C 0000 add [bx+si],al bp 0000 i=1
cs:000E 0000 add [bx+si],al sp 0000 d=0
cs:0010 0000 add [bx+si],al ds 449D
cs:0012 0000 add [bx+si],al es 449D
cs:0014 0000 add [bx+si],al ss 44AC
cs:0016 0000 add [bx+si],al cs 44AD
cs:0018 0000 add [bx+si],al ip 0007

ds:2000 37 00 00 00 00 00 00 00 7
ds:2008 00 00 00 00 00 00 00 00
ds:2010 00 00 00 00 00 00 00 00
ds:2018 00 00 00 00 00 00 00 00
ss:0002 6568
ss:0000 6474

F1-Help F2-Bkpt F3-Mod F4-Here F5-Zoom F6-Next F7-Trace F8-Step F9-Run F10-Menu
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**STAFF SIGNATURE**

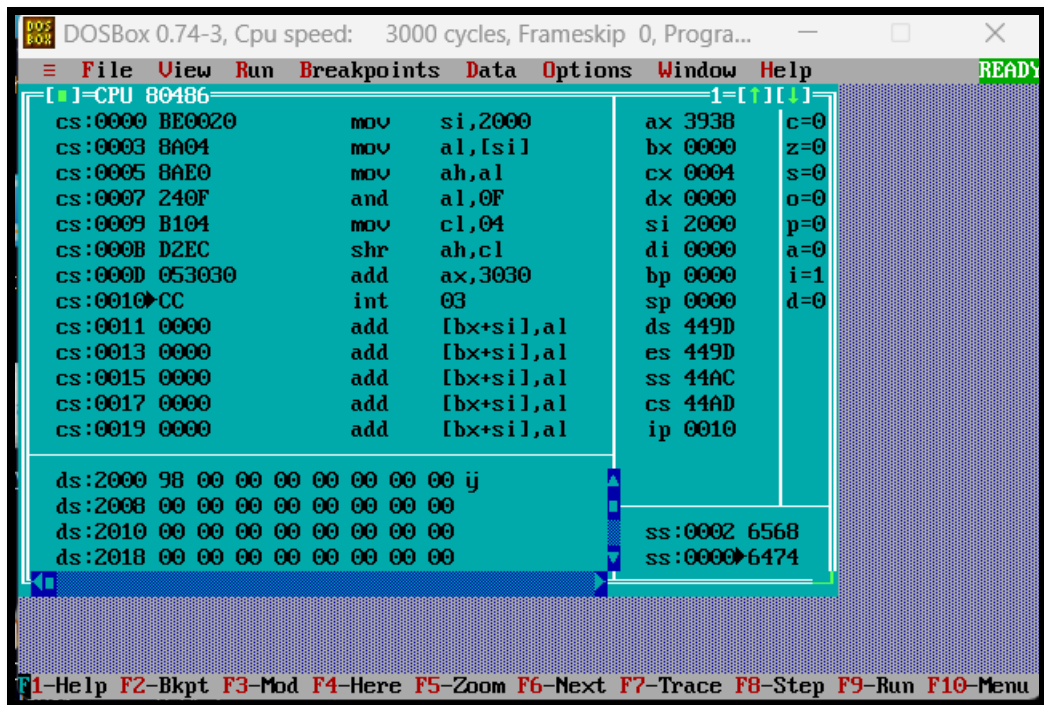
# BCD TO ASCII OPERATIONS

**INPUT:AL=98H**

**OUTPUT:AL=3938H**

**NAME:K.SUDARSHAN**

**ROLL NO:20G01A0454**



The screenshot shows the DOSBox 0.74-3 interface. The CPU is 80486. The assembly code is as follows:

Address	Code
cs:0000 BE0020	mov si,2000
cs:0003 8A04	mov al,[si]
cs:0005 8AE0	mov ah,al
cs:0007 240F	and al,0F
cs:0009 B104	mov cl,04
cs:000B D2EC	shr ah,cl
cs:000D 053030	add ax,3030
cs:0010 CC	int 03
cs:0011 0000	add [bx+si],al
cs:0013 0000	add [bx+si],al
cs:0015 0000	add [bx+si],al
cs:0017 0000	add [bx+si],al
cs:0019 0000	add [bx+si],al

Register values:

Register	Value
ax	3938
bx	0000
cx	0004
dx	0000
si	2000
di	0000
bp	0000
sp	0000
ds	449D
es	449D
ss	44AC
cs	44AD
ip	0010

Memory dump:

Address	Value
ds:2000	98 00 00 00 00 00 00 00 ij
ds:2008	00 00 00 00 00 00 00 00
ds:2010	00 00 00 00 00 00 00 00
ds:2018	00 00 00 00 00 00 00 00

Stack pointer (ss) values:

Address	Value
ss:0002	6568
ss:0000	6474

Legend: F1-Help F2-Bkpt F3-Mod F4-Here F5-Zoom F6-Next F7-Trace F8-Step F9-Run F10-Menu

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