

## Write an ALP for addition of 16-bit BCD numbers.

### Code:

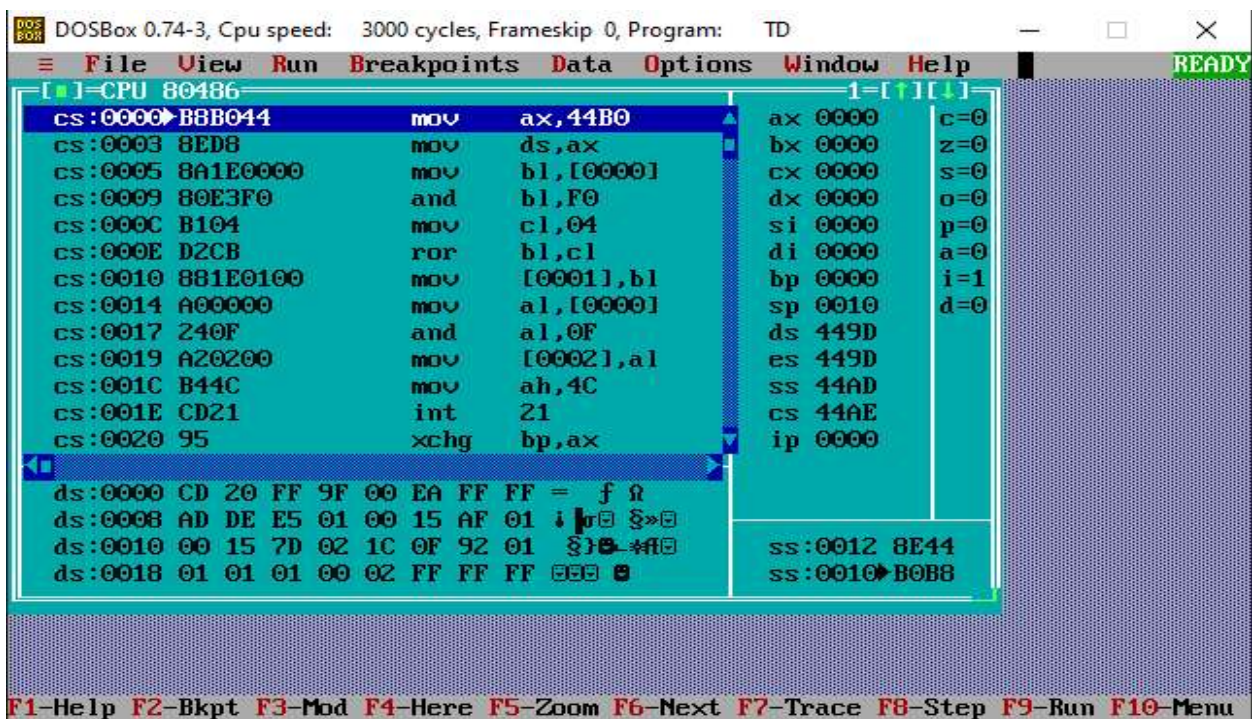
```
model small
stack 10h
data segment
    num db 95h
    num1 db 00h
    num2 db 00h
data ends
code segment
    assume cs:code, ds:data
start:
    mov ax, data
    mov ds, ax

    mov bl, num
    and bl, 0F0h
    mov cl, 04h
    ror bl, cl

    mov num1, bl

    mov al, num
    and al, 0Fh
    mov num2, al

    mov ah, 4ch
    int 21h
code ends
end start
```





DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: TD

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[CPU 80486]

cs:0000	B8B044	mov	ax,44B0	ax	44B0	c=0
cs:0003	8ED8	mov	ds,ax	bx	0095	z=0
cs:0005	8A1E0000	mov	bl,[0000]	cx	0000	s=0
cs:0009	80E3F0	and	bl,F0	dx	0000	o=0
cs:000C	B104	mov	cl,04	si	0000	p=0
cs:000E	D2CB	ror	bl,cl	di	0000	a=0
cs:0010	881E0100	mov	[0001],bl	bp	0000	i=1
cs:0014	A00000	mov	al,[0000]	sp	0010	d=0
cs:0017	240F	and	al,0F	ds	44B0	
cs:0019	A20200	mov	[0002],al	es	449D	
cs:001C	B44C	mov	ah,4C	ss	44AD	
cs:001E	CD21	int	21	cs	44AE	
cs:0020	95	xchg	bp,ax	ip	0009	

ds:0000 95 00 00 00 00 00 00 00 00 ð  
ds:0008 00 00 00 00 00 00 00 00  
ds:0010 00 00 00 00 00 00 00 00  
ds:0018 00 00 00 00 00 00 00 00

ss:0012 8E44  
ss:0010 B0B8

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

mov ax, 44B0      Loading the data segment into AX  
 mov ds, ax      Setting up the data segment  
 mov bl, [0000]    Copying the tens digit of 95 to BL register

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: TD

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[CPU 80486]

cs:0000	B8B044	mov	ax,44B0	ax	44B0	c=0
cs:0003	8ED8	mov	ds,ax	bx	0090	z=0
cs:0005	8A1E0000	mov	bl,[0000]	cx	0000	s=1
cs:0009	80E3F0	and	bl,F0	dx	0000	o=0
cs:000C	B104	mov	cl,04	si	0000	p=1
cs:000E	D2CB	ror	bl,cl	di	0000	a=0
cs:0010	881E0100	mov	[0001],bl	bp	0000	i=1
cs:0014	A00000	mov	al,[0000]	sp	0010	d=0
cs:0017	240F	and	al,0F	ds	44B0	
cs:0019	A20200	mov	[0002],al	es	449D	
cs:001C	B44C	mov	ah,4C	ss	44AD	
cs:001E	CD21	int	21	cs	44AE	
cs:0020	95	xchg	bp,ax	ip	000C	

ds:0000 95 00 00 00 00 00 00 00 00 ð  
ds:0008 00 00 00 00 00 00 00 00  
ds:0010 00 00 00 00 00 00 00 00  
ds:0018 00 00 00 00 00 00 00 00

ss:0012 8E44  
ss:0010 B0B8

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

and bl, F0      Keeping only the tens digit in BL



DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: TD

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[CPU 80486] 1=[↑][↓]

cs:0000	B8B044	mov	ax,44B0	ax	44B0	c=0
cs:0003	8ED8	mov	ds,ax	bx	0090	z=0
cs:0005	8A1E0000	mov	bl,[0000]	cx	0004	s=1
cs:0009	80E3F0	and	bl,F0	dx	0000	o=0
cs:000C	B104	mov	cl,04	si	0000	p=1
cs:000E	D2CB	ror	bl,cl	di	0000	a=0
cs:0010	881E0100	mov	[0001],bl	bp	0000	i=1
cs:0014	A00000	mov	al,[0000]	sp	0010	d=0
cs:0017	240F	and	al,0F	ds	44B0	
cs:0019	A20200	mov	[0002],al	es	449D	
cs:001C	B44C	mov	ah,4C	ss	44AD	
cs:001E	CD21	int	21	cs	44AE	
cs:0020	95	xchg	bp,ax	ip	000E	

ds:0000 95 00 00 00 00 00 00 00 00  
ds:0008 00 00 00 00 00 00 00 00  
ds:0010 00 00 00 00 00 00 00 00  
ds:0018 00 00 00 00 00 00 00 00

ss:0012 8E44  
ss:0010 B0B8

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

mov cl, 04      Preparing to shift the tens digit to the right

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: TD

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[CPU 80486] ds:0001 = 00 1=[↑][↓]

cs:0000	B8B044	mov	ax,44B0	ax	44B0	c=0
cs:0003	8ED8	mov	ds,ax	bx	0009	z=0
cs:0005	8A1E0000	mov	bl,[0000]	cx	0004	s=1
cs:0009	80E3F0	and	bl,F0	dx	0000	o=0
cs:000C	B104	mov	cl,04	si	0000	p=1
cs:000E	D2CB	ror	bl,cl	di	0000	a=0
cs:0010	881E0100	mov	[0001],bl	bp	0000	i=1
cs:0014	A00000	mov	al,[0000]	sp	0010	d=0
cs:0017	240F	and	al,0F	ds	44B0	
cs:0019	A20200	mov	[0002],al	es	449D	
cs:001C	B44C	mov	ah,4C	ss	44AD	
cs:001E	CD21	int	21	cs	44AE	
cs:0020	95	xchg	bp,ax	ip	0010	

ds:0000 95 00 00 00 00 00 00 00 00  
ds:0008 00 00 00 00 00 00 00 00  
ds:0010 00 00 00 00 00 00 00 00  
ds:0018 00 00 00 00 00 00 00 00

ss:0012 8E44  
ss:0010 B0B8

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

ror bl, cl      Shifting the tens digit to the right











DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: TD

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[F1]-CPU 80486 1-[↑][↓]

cs:0000	B8B044	mov	ax,44B0	ax	4C05	c=0
cs:0003	8ED8	mov	ds,ax	bx	0009	z=0
cs:0005	8A1E0000	mov	bl,[0000]	cx	0004	s=0
cs:0009	80E3F0	and	bl,F0	dx	0000	o=0
cs:000C	B104	mov	cl,04	si	0000	p=1
cs:000E	D2CB	ror	bl,cl	di	0000	a=0
cs:0010	881E0100	mov	[0001],bl	bp	0000	i=1
cs:0014	A00000	mov	al,[0000]	sp	0010	d=0
cs:0017	240F	and	al,0F	ds	44B0	
cs:0019	A20200	mov	[0002],al	es	449D	
cs:001C	B44C	mov	ah,4C	ss	44AD	
cs:001E	CD21	int	21	cs	44AE	
cs:0020	95	xchg	bp,ax	ip	001E	

ds:0000 95 09 05 00 00 00 00 00 ðoø

ds:0008 00 00 00 00 00 00 00 00

ds:0010 00 00 00 00 00 00 00 00

ds:0018 00 00 00 00 00 00 00 00

ss:0012 8E44

ss:0010 BOB8

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

```
mov ah, 4C
```

**Write an ALP to convert a packed BCD number to an unpacked BCD number.**

Code:

model small

stack 10h

data segment

num1 dw 1234h

num2 dw 5689h

res dw ?

data ends

code segment

assume cs: code, ds: data

start:

mov ax, data

mov ds, ax

mov ax, num1

mov bx, num2

add al, bl

daa

mov cl, al

adc ah, bh

mov al, ah

daa

mov ch, al

mov res, cx

int 21h

code ends

end start



DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: TD

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[CPU 80486]

cs:0000 B8B044	mov	ax,44B0	ax 0000	c=0
cs:0003 8ED8	mov	ds,ax	bx 0000	z=0
cs:0005 A10000	mov	ax,[0000]	cx 0000	s=0
cs:0008 8B1E0200	mov	bx,[0002]	dx 0000	o=0
cs:000C 02C3	add	al,bl	si 0000	p=0
cs:000E 27	daa		di 0000	a=0
cs:000F 8AC8	mov	cl,al	bp 0000	i=1
cs:0011 12E7	adc	ah,bh	sp 0010	d=0
cs:0013 8AC4	mov	al,ah	ds 449D	
cs:0015 27	daa		es 449D	
cs:0016 8AE8	mov	ch,al	ss 44AD	
cs:0018 890E0400	mov	[0004],cx	cs 44AE	
cs:001C CD21	int	21	ip 0000	

ds:0000 CD 20 FF 9F 00 EA FF FF = f Ω  
ds:0008 AD DE E5 01 00 15 AF 01 i r S>  
ds:0010 00 15 7D 02 1C 0F 92 01 S>S-#f  
ds:0018 01 01 01 00 02 FF FF FF S>S>

ss:0012 8E44  
ss:0010 B0B8

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

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: TD

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[CPU 80486]

cs:0000 B8B044	mov	ax,44B0	ax 44B0	c=0
cs:0003 8ED8	mov	ds,ax	bx 0000	z=0
cs:0005 A10000	mov	ax,[0000]	cx 0000	s=0
cs:0008 8B1E0200	mov	bx,[0002]	dx 0000	o=0
cs:000C 02C3	add	al,bl	si 0000	p=0
cs:000E 27	daa		di 0000	a=0
cs:000F 8AC8	mov	cl,al	bp 0000	i=1
cs:0011 12E7	adc	ah,bh	sp 0010	d=0
cs:0013 8AC4	mov	al,ah	ds 449D	
cs:0015 27	daa		es 449D	
cs:0016 8AE8	mov	ch,al	ss 44AD	
cs:0018 890E0400	mov	[0004],cx	cs 44AE	
cs:001C CD21	int	21	ip 0003	

ds:0000 CD 20 FF 9F 00 EA FF FF = f Ω  
ds:0008 AD DE E5 01 00 15 AF 01 i r S>  
ds:0010 00 15 7D 02 1C 0F 92 01 S>S-#f  
ds:0018 01 01 01 00 02 FF FF FF S>S>

ss:0012 8E44  
ss:0010 B0B8

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

mov ax, 44B0      Load the address of the data segment into AX



DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: TD

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[CPU 80486] ds:0000 = 1234

cs:0000	BBB044	mov	ax, 44B0	ax	44B0	c=0
cs:0003	8ED8	mov	ds, ax	bx	0000	z=0
cs:0005	A10000	mov	ax, [0000]	cx	0000	s=0
cs:0008	8B1E0200	mov	bx, [0002]	dx	0000	o=0
cs:000C	02C3	add	al, bl	si	0000	p=0
cs:000E	27	daa		di	0000	a=0
cs:000F	8AC8	mov	cl, al	bp	0000	i=1
cs:0011	12E7	adc	ah, bh	sp	0010	d=0
cs:0013	8AC4	mov	al, ah	ds	44B0	
cs:0015	27	daa		es	449D	
cs:0016	8AE8	mov	ch, al	ss	44AD	
cs:0018	890E0400	mov	[0004], cx	cs	44AE	
cs:001C	CD21	int	21	ip	0005	

ds:0000 34 12 89 56 00 00 00 00 4teU  
ds:0008 00 00 00 00 00 00 00 00  
ds:0010 00 00 00 00 00 00 00 00  
ds:0018 00 00 00 00 00 00 00 00

ss:0012 8E44  
ss:0010 B0B8

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

mov ds, ax      Set the data segment register to the address in AX

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: TD

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[CPU 80486] ds:0002 = 5689

cs:0000	BBB044	mov	ax, 44B0	ax	1234	c=0
cs:0003	8ED8	mov	ds, ax	bx	0000	z=0
cs:0005	A10000	mov	ax, [0000]	cx	0000	s=0
cs:0008	8B1E0200	mov	bx, [0002]	dx	0000	o=0
cs:000C	02C3	add	al, bl	si	0000	p=0
cs:000E	27	daa		di	0000	a=0
cs:000F	8AC8	mov	cl, al	bp	0000	i=1
cs:0011	12E7	adc	ah, bh	sp	0010	d=0
cs:0013	8AC4	mov	al, ah	ds	44B0	
cs:0015	27	daa		es	449D	
cs:0016	8AE8	mov	ch, al	ss	44AD	
cs:0018	890E0400	mov	[0004], cx	cs	44AE	
cs:001C	CD21	int	21	ip	0008	

ds:0000 34 12 89 56 00 00 00 00 4teU  
ds:0008 00 00 00 00 00 00 00 00  
ds:0010 00 00 00 00 00 00 00 00  
ds:0018 00 00 00 00 00 00 00 00

ss:0012 8E44  
ss:0010 B0B8

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

mov ax, [0000]      Load the value of num1 into AX register



DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: TD

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[CPU 80486] 1=[↑][↓]

cs:0000	B8B044	mov	ax,44B0	ax	1234	c=0
cs:0003	8ED8	mov	ds,ax	bx	5689	z=0
cs:0005	A10000	mov	ax,[0000]	cx	0000	s=0
cs:0008	8B1E0200	mov	bx,[0002]	dx	0000	o=0
cs:000C	02C3	add	al,bl	si	0000	p=0
cs:000E	27	daa		di	0000	a=0
cs:000F	8AC8	mov	cl,al	bp	0000	i=1
cs:0011	12E7	adc	ah,bh	sp	0010	d=0
cs:0013	8AC4	mov	al,ah	ds	44B0	
cs:0015	27	daa		es	449D	
cs:0016	8AE8	mov	ch,al	ss	44AD	
cs:0018	890E0400	mov	[0004],cx	cs	44AE	
cs:001C	CD21	int	21	ip	000C	

ds:0000 34 12 89 56 00 00 00 00 4teU

ds:0008 00 00 00 00 00 00 00 00

ds:0010 00 00 00 00 00 00 00 00

ds:0018 00 00 00 00 00 00 00 00

ss:0012 8E44

ss:0010 B0B8

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

mov bx, [0002]      Load the value of num2 into BX register

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: TD

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[CPU 80486] 1=[↑][↓]

cs:0000	B8B044	mov	ax,44B0	ax	12BD	c=0
cs:0003	8ED8	mov	ds,ax	bx	5689	z=0
cs:0005	A10000	mov	ax,[0000]	cx	0000	s=1
cs:0008	8B1E0200	mov	bx,[0002]	dx	0000	o=0
cs:000C	02C3	add	al,bl	si	0000	p=1
cs:000E	27	daa		di	0000	a=0
cs:000F	8AC8	mov	cl,al	bp	0000	i=1
cs:0011	12E7	adc	ah,bh	sp	0010	d=0
cs:0013	8AC4	mov	al,ah	ds	44B0	
cs:0015	27	daa		es	449D	
cs:0016	8AE8	mov	ch,al	ss	44AD	
cs:0018	890E0400	mov	[0004],cx	cs	44AE	
cs:001C	CD21	int	21	ip	000E	

ds:0000 34 12 89 56 00 00 00 00 4teU

ds:0008 00 00 00 00 00 00 00 00

ds:0010 00 00 00 00 00 00 00 00

ds:0018 00 00 00 00 00 00 00 00

ss:0012 8E44

ss:0010 B0B8

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

add al, bl      Add the low bytes of num1 and num2, storing the result in AL



DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: TD

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[CPU 80486]

cs:0000	BBB044	mov	ax,44B0	ax	1223	c=1
cs:0003	8ED8	mov	ds,ax	bx	5689	z=0
cs:0005	A10000	mov	ax,[0000]	cx	0000	s=0
cs:0008	8B1E0200	mov	bx,[0002]	dx	0000	o=0
cs:000C	02C3	add	al,bl	si	0000	p=0
cs:000E	27	daa		di	0000	a=1
cs:000F	8AC8	mov	cl,al	bp	0000	i=1
cs:0011	12E7	adc	ah,bh	sp	0010	d=0
cs:0013	8AC4	mov	al,ah	ds	44B0	
cs:0015	27	daa		es	449D	
cs:0016	8AE8	mov	ch,al	ss	44AD	
cs:0018	890E0400	mov	[0004],cx	cs	44AE	
cs:001C	CD21	int	21	ip	000F	

ds:0000 34 12 89 56 00 00 00 00 4teU

ds:0008 00 00 00 00 00 00 00 00

ds:0010 00 00 00 00 00 00 00 00

ds:0018 00 00 00 00 00 00 00 00

ss:0012 8E44

ss:0010 B0BB

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

daa Adjust AL after addition to handle decimal carry

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: TD

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[CPU 80486]

cs:0000	BBB044	mov	ax,44B0	ax	1223	c=1
cs:0003	8ED8	mov	ds,ax	bx	5689	z=0
cs:0005	A10000	mov	ax,[0000]	cx	0023	s=0
cs:0008	8B1E0200	mov	bx,[0002]	dx	0000	o=0
cs:000C	02C3	add	al,bl	si	0000	p=0
cs:000E	27	daa		di	0000	a=1
cs:000F	8AC8	mov	cl,al	bp	0000	i=1
cs:0011	12E7	adc	ah,bh	sp	0010	d=0
cs:0013	8AC4	mov	al,ah	ds	44B0	
cs:0015	27	daa		es	449D	
cs:0016	8AE8	mov	ch,al	ss	44AD	
cs:0018	890E0400	mov	[0004],cx	cs	44AE	
cs:001C	CD21	int	21	ip	0011	

ds:0000 34 12 89 56 00 00 00 00 4teU

ds:0008 00 00 00 00 00 00 00 00

ds:0010 00 00 00 00 00 00 00 00

ds:0018 00 00 00 00 00 00 00 00

ss:0012 8E44

ss:0010 B0BB

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

mov cl, al Move the adjusted low byte to CL register



DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: TD

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[CPU 80486]

cs:0000	BBB044	mov	ax, 44B0	ax	6923	c=0
cs:0003	8ED8	mov	ds, ax	bx	5689	z=0
cs:0005	A10000	mov	ax, [0000]	cx	0023	s=0
cs:0008	8B1E0200	mov	bx, [0002]	dx	0000	o=0
cs:000C	02C3	add	al, bl	si	0000	p=1
cs:000E	27	daa		di	0000	a=0
cs:000F	8AC8	mov	cl, al	bp	0000	i=1
cs:0011	12E7	adc	ah, bh	sp	0010	d=0
cs:0013	8AC4	mov	al, ah	ds	44B0	
cs:0015	27	daa		es	449D	
cs:0016	8AE8	mov	ch, al	ss	44AD	
cs:0018	890E0400	mov	[0004], cx	cs	44AE	
cs:001C	CD21	int	21	ip	0013	

ds:0000 34 12 89 56 00 00 00 00 4teU

ds:0008 00 00 00 00 00 00 00 00

ds:0010 00 00 00 00 00 00 00 00

ds:0018 00 00 00 00 00 00 00 00

ss:0012 8E44

ss:0010 B0B8

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

adc ah, bh      Add the high bytes of num1 and num2 along with carry to AH

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: TD

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[CPU 80486]

cs:0000	BBB044	mov	ax, 44B0	ax	6969	c=0
cs:0003	8ED8	mov	ds, ax	bx	5689	z=0
cs:0005	A10000	mov	ax, [0000]	cx	0023	s=0
cs:0008	8B1E0200	mov	bx, [0002]	dx	0000	o=0
cs:000C	02C3	add	al, bl	si	0000	p=1
cs:000E	27	daa		di	0000	a=0
cs:000F	8AC8	mov	cl, al	bp	0000	i=1
cs:0011	12E7	adc	ah, bh	sp	0010	d=0
cs:0013	8AC4	mov	al, ah	ds	44B0	
cs:0015	27	daa		es	449D	
cs:0016	8AE8	mov	ch, al	ss	44AD	
cs:0018	890E0400	mov	[0004], cx	cs	44AE	
cs:001C	CD21	int	21	ip	0015	

ds:0000 34 12 89 56 00 00 00 00 4teU

ds:0008 00 00 00 00 00 00 00 00

ds:0010 00 00 00 00 00 00 00 00

ds:0018 00 00 00 00 00 00 00 00

ss:0012 8E44

ss:0010 B0B8

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

mov al, ah      Move the adjusted high byte to AL register



DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: TD

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[CPU 80486] 1=[↑][↓]

cs:0000	BBB044	mov	ax,44B0	ax	6969	c=0
cs:0003	8ED8	mov	ds,ax	bx	5689	z=0
cs:0005	A10000	mov	ax,[0000]	cx	0023	s=0
cs:0008	8B1E0200	mov	bx,[0002]	dx	0000	o=0
cs:000C	02C3	add	al,bl	si	0000	p=1
cs:000E	27	daa		di	0000	a=0
cs:000F	8AC8	mov	cl,al	bp	0000	i=1
cs:0011	12E7	adc	ah,bh	sp	0010	d=0
cs:0013	8AC4	mov	al,ah	ds	44B0	
cs:0015	27	daa		es	449D	
cs:0016	8AE8	mov	ch,al	ss	44AD	
cs:0018	890E0400	mov	[0004],cx	cs	44AE	
cs:001C	CD21	int	21	ip	0016	

ds:0000 34 12 89 56 00 00 00 00 4teU

ds:0008 00 00 00 00 00 00 00 00

ds:0010 00 00 00 00 00 00 00 00

ds:0018 00 00 00 00 00 00 00 00

ss:0012 8E44

ss:0010 B0B8

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

daa Adjust AL after addition to handle decimal carry

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: TD

File View Run Breakpoints Data Options Window Help

[CPU 80486] ds:0004 = 0000 1=[↑][↓]

cs:0000	BBB044	mov	ax,44B0	ax	6969	c=0
cs:0003	8ED8	mov	ds,ax	bx	5689	z=0
cs:0005	A10000	mov	ax,[0000]	cx	6923	s=0
cs:0008	8B1E0200	mov	bx,[0002]	dx	0000	o=0
cs:000C	02C3	add	al,bl	si	0000	p=1
cs:000E	27	daa		di	0000	a=0
cs:000F	8AC8	mov	cl,al	bp	0000	i=1
cs:0011	12E7	adc	ah,bh	sp	0010	d=0
cs:0013	8AC4	mov	al,ah	ds	44B0	
cs:0015	27	daa		es	449D	
cs:0016	8AE8	mov	ch,al	ss	44AD	
cs:0018	890E0400	mov	[0004],cx	cs	44AE	
cs:001C	CD21	int	21	ip	0018	

ds:0000 34 12 89 56 00 00 00 00 4teU

ds:0008 00 00 00 00 00 00 00 00

ds:0010 00 00 00 00 00 00 00 00

ds:0018 00 00 00 00 00 00 00 00

ss:0012 8E44

ss:0010 B0B8

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

mov ch, al Move the final adjusted high byte to CH register



DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: TD

File View Run Breakpoints Data Options Window Help

CPU 80486

cs:001C>CD21

int 21

cs:001E 0000

add [bx+si],al

cs:0020 3412

xor al,12

cs:0022 895623

mov [bp+23],dx

cs:0025 69000000

imul ax,[bx+si],00

cs:0029 0000

add [bx+si],al

cs:002B 0000

add [bx+si],al

cs:002D 0000

add [bx+si],al

cs:002F 0000

add [bx+si],al

cs:0031 0000

add [bx+si],al

cs:0033 0000

add [bx+si],al

cs:0035 0000

add [bx+si],al

cs:0037 0000

add [bx+si],al

ax 6969

bx 5689

cx 6923

dx 0000

si 0000

di 0000

bp 0000

sp 0010

ds 44B0

es 449D

ss 44AD

cs 44AE

ip 001C

c=0

z=0

s=0

o=0

p=1

a=0

i=1

d=0

ds:0000 34 12 89 56 23 69 00 00 4teU#i

ds:0008 00 00 00 00 00 00 00 00

ds:0010 00 00 00 00 00 00 00 00

ds:0018 00 00 00 00 00 00 00 00

ss:0012 8E44

ss:0010>B0B8

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