

;Cau 1: Viet chương trình hợp ngữ dịch đuôi EXE dùng để nhập 2 số kiểu BYTE, in tổng và hiệu của hai số vừa nhập

```
.model tiny
.stack 100h
.data
    tb1 db 'Nhập số thứ nhất kiểu byte: $'
    tb2 db 13,10,'Nhập số thứ hai kiểu byte: $'
    tb3 db 13,10,'Tổng hai số = $'
    tb4 db 13,10,'Hiệu hai số = $'
    so1 db 0
    so2 db 0
.code
main proc
    mov ax,@data
    mov ds,ax
    lea dx,tb1
    mov ah,9
    int 21h
    mov cl, 10
nhap1:
    mov ah,1
    int 21h
    cmp al,13
    je ra1
    sub al,30h    ; đổi số sang mã ascii
```

```

    mov bl,al    ;dua kq al vao bl
    mov al,so1   ;cap nhat so1 vao al
    mul cl       ;nhan al cl ket qua cat vao ax nhung do so kieu byte nen ah =0
    add al,bl    ;cong al,bl
    mov so1,al   ;cap nhat gia tri moi cho bien kieu byte
    jmp nhap1:

ra1:
    lea dx,tb2
    mov ah,9
    int 21h

nhap2:
    mov ah,1
    int 21h
    cmp al,13
    je ra2
    sub al,30h   ;doi so sang ma ascii
    mov bl,al    ;dua kq al vao bl
    mov al,so2   ;cap nhat so2 vao al
    mul cl       ;nhan al cl ket qua cat vao ax nhung do so kieu byte nen ah =0
    add al,bl    ;cong al,bl
    mov so2,al   ;cap nhat gia tri moi cho bien kieu byte
    jmp nhap2:

ra2:
    lea dx,tb3
    mov ah,9

```

```

int 21h
mov ah, 0 ;xoa bit cao
mov al,so1 ; chuyen so1 vao thanh ghi al
mov bh, 0 ; xoa bit cao
mov bl, so2 ; chuyen so2 vao thanh ghi bl
add ax, bx
mov bx,10 ; gan bx=10
mov dx,0 ; xoa bit cao de thuc hien chia 32 cho 16
mov cx,0 ; khoi tao bien cx den so lan cat vao stack
chia1:
div bx ; lay dxax chia bx thuong cat ax du cat dx
;thuc chat la ax chix dx=0
push dx ;day gia tri dx vao stack
inc cx ; dem so lan cat vao stack
cmp ax,0 ; kiem tra thuong bang 0 hay chua
je hienso1 ; neu bang thi hien
mov dx,0
jmp chia1
hienso1:
pop dx ;lay du tu stack dua vao dx
add dl,30h ;doi so sang ma
mov ah,2
int 21h
loop hienso1
lea dx,tb4

```

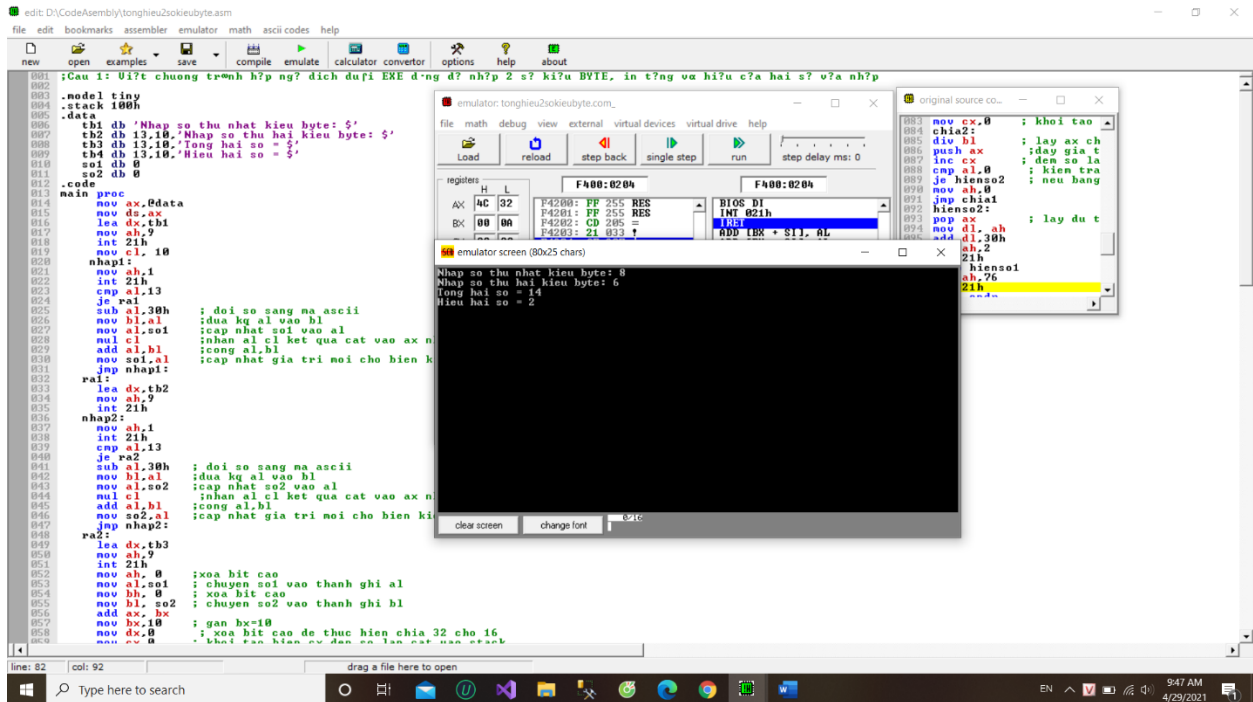
```

mov ah,9
int 21h
mov al,so1
mov bl,so2
sub al,bl
mov bl,10 ; gan bx=10
mov ah,0 ; xoa bit cao de thuc hien chia 32 cho 16
mov cx,0 ; khoi tao bien cx den so lan cat vao stack
chia2:
div bl ; lay ax chia cho bl du cat ah thuong cat al
push ax ;day gia tri ax vao stack
inc cx ; dem so lan cat vao stack
cmp al,0 ; kiem tra bang 0 hay chua
je hienso2 ; neu bang thi hien
mov ah,0
jmp chia1
hienso2:
pop ax ; lay du tu stack dua vao ax
mov dl, ah
add dl,30h
mov ah,2
int 21h
loop hienso1
mov ah,76
int 21h

```

main endp

end main



Cau 2: Viet chuong trinh hop ngu dich ra duoi EXE dung de nhap vao mot cau ket thuc bang Enter. Dem so tu trong cau va in cau vua nhap ra man hinh.

.model tiny

.stack 100h

.data

tb1 db 'Nhap vao mot xau: \$'

tb2 db 13,10, 'Dem so ki tu vua nhap: \$'

tb3 db 13,10,'in xau: \$'

s db 200 dup(' ')

.code

main proc

mov ax,@data

;xuat xau tb1

lea dx,tb1

mov ah,9

int 21h

;nhap xau

mov ah,0ah

lea dx,s

int 21h

lea dx,tb2

mov ah,9

int 21h

mov ax,0 ; gan ax=0

mov al,s+1

mov cx,0;dem so ki tu nhap vao

mov bx,10 ; gan bx=10

lap:

mov dx,0

div bx ; lay dxax chia bx thuong cat ax du cat dx

;thuc chat la ax chix dx=0

push dx ;day gia tri dx vao stack

inc cx ;dem so lan cat vao stack

cmp ax,0 ;ktra bang 0

jnz lap ;nhay den lap

mov ah,2

lap1:

pop dx ;lay du tu stack dua vao dx

or dl,'0'; chuyen chu sang so

int 21h

loop lap1

lea dx,tb3

mov ah,9

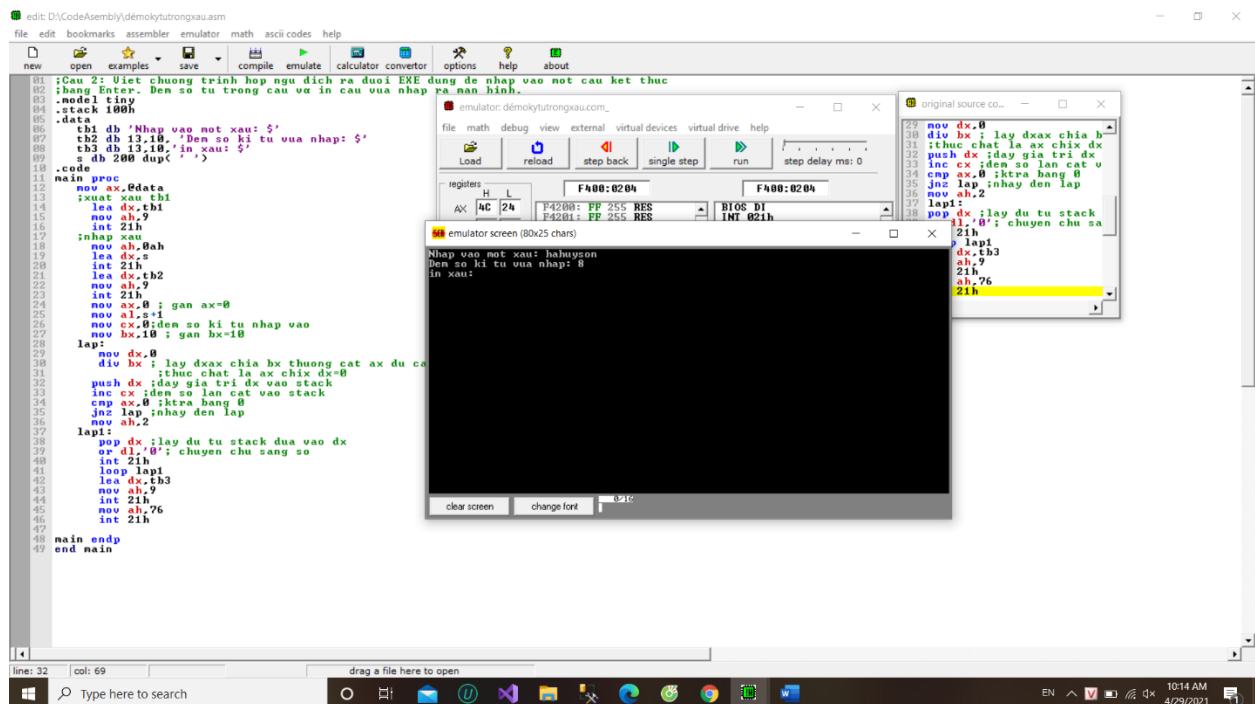
int 21h

mov ah,76

int 21h

main endp

end main



```
edit: D:\CodeAssembly\demokytutrongxau.asm
file  edit  bookmarks  assembler  emulator  math  ascii codes  help
new  open  examples  save  compile  emulate  calculator  convertor  options  help  about
01 ;Cau 2: Viet chuong trinh hop ngu dich ra duoi EXE dung de nhap vao mot cau ket thuc
02 ;hang Enter. Den so tu trong cau va in cau vua nhap ra nhan hinh.
03 .model tiny
04 .stack 100h
05 .data
06     tb1 db 'Nhap vao mot xau: $'
07     tb2 db 13,10,'Den so ki tu trong cau va in cau vua nhap ra nhan hinh.'
08     tb3 db 13,10,'in xau: $'
09     s db 200 dup(,)>
10 .code
11 main proc
12     mov ax,@data
13     xuat xau tb1
14     lea dx,tb1
15     mov ah,9
16     int 21h
17     ;nhap xau
18     mov ah,0ah
19     lea dx,s
20     int 21h
21     lea dx,tb2
22     mov ah,9
23     int 21h
24     mov ax,0 ; gan ax=0
25     mov al,s+1
26     mov cx,0;den so ki tu nhap vao
27     mov bx,10 ; gan bx=10
28     lap:
29         mov dx,0
30         div bx ; lay dxax chia bx thuong cat ax du co
31         ;thuc chat la ax chix dx=0
32         push dx ;day gia tri dx vao stack
33         inc cx ;den so lan cat vao stack
34         cmp ax,0 ;ktra bang 0
35         jnz lap ;nhay den lap
36         mov ah,2
37     lap1:
38         pop dx ;lay du tu stack dua vao dx
39         or dl,'0'; chuyen chu sang so
40         int 21h
41     loop lap1
42     lea dx,tb3
43     mov ah,9
44     int 21h
45     mov ah,76
46     int 21h
47
48 main endp
49 end main
```

emulator: demokytutrongxau.com

file math debug view external virtual devices virtual drive help

Load reload step back single step run step delay ms: 0

registers

H	L	F400:0204	F400:0204
AX	4C 24	F4200: PF 255 RES	B108 01
		F4201: PF 255 RES	INT 021h

emulator screen (80x25 chars)

```
Nhap vao mot xau: bahtygon
Den so ki tu trong cau va in cau vua nhap: 8
in xau:
bahtygon
```

original source code...

```
29 mov dx,0
30 div bx ; lay dxax chia bx
31 ;thuc chat la ax chix dx
32 push dx ;day gia tri dx
33 inc cx ;den so lan cat v
34 cmp ax,0 ;ktra bang 0
35 jnz lap ;nhay den lap
36 mov ah,2
37 lap1:
38 pop dx ;lay du tu stack
39 or dl,'0'; chuyen chu sa
```