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| Hoàng Mạnh Thắng | |
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| 1 | <https://web.microsoftstream.com/video/ad61e78d-ddb1-499e-8ea0-6aefde2c41b6/?autoplay=true&app=microsoftteams&showinfo=false> |
| 2 | <https://web.microsoftstream.com/video/af4ac745-8841-4ba1-9fab-49713d81a10c> |
| 3 | <https://web.microsoftstream.com/video/78ea6a9b-2a94-458b-94a3-603a1c1b5b4b> |
| 4 | <https://web.microsoftstream.com/video/c364f500-bb27-41d9-86eb-f75dee8a5f26> |
| 5 | <https://web.microsoftstream.com/video/929e5fa9-9a43-490a-a9d7-2375d364b722> |
| 6 | <https://web.microsoftstream.com/video/13cc7852-bc7a-4cd9-88cf-c2b8a707b7ab> |
| 7 | <https://web.microsoftstream.com/video/3c96a11a-c5b9-4b5e-b1ff-f1044c485abe> |
| 8 | <https://web.microsoftstream.com/video/0929917a-62e3-4810-8e8a-e6f8fc85fa93> |
| 9 | <https://web.microsoftstream.com/video/9a2bc61a-b95e-4120-ad1c-6a6a3634c7a8> |

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| Hàn Huy Dũng | |
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| 1 |  |
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| 4 | <https://web.microsoftstream.com/video/235772df-981d-408e-aa8e-225ea59fef2b> |
| 5 |  |
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Hệ thống nhúng: <http://users.ece.utexas.edu/~valvano/Volume1/E-Book/?fbclid=IwAR1d46DhfRdETO7GFSrNp0FPUfuS4AUm0lF8vDaeed_TdO7m9fXOUDVzWB8>

Bài tập về nhà Chapter2: <http://users.ece.utexas.edu/~valvano/Volume1/E-Book/C2_FundamentalConcepts.htm>

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| Nguyễn Huy Hoàng | |
| 1(23/03) | <https://web.microsoftstream.com/video/1deeedc0-e526-4546-ac69-f210f17930a8>  <https://web.microsoftstream.com/video/6368cc86-f156-48f4-a717-600c14c6be2c> |
| 2(16/03) | <https://web.microsoftstream.com/video/8f6412a0-4ff5-4329-b21e-006e155cc87b>  <https://web.microsoftstream.com/video/9d87732d-7f48-4258-86b0-198bd39a0d0c> |
| 3(30/03) | <https://web.microsoftstream.com/video/b03813ea-6ac6-4600-9ba2-caeafb582612> |
| 4(06/04) | <https://web.microsoftstream.com/video/d622090b-0245-44a1-a49a-81062fe11e2a> |
| 5(13/04) | <https://web.microsoftstream.com/video/18119f00-0115-44a9-b279-ab1ad4fec762> |
| 6(20/04) | <https://web.microsoftstream.com/video/7d66c645-eb75-44d4-a5dd-4f80ff8a1c65>  <https://web.microsoftstream.com/video/5bedbd73-4cce-4dc9-a906-6c7ceaf49883>  <https://web.microsoftstream.com/video/2510bbe1-cfce-4436-9f41-b8a6b961be5a> |
| 7(27/04) | <https://web.microsoftstream.com/video/18fbcacf-5bdd-44b3-ac7a-771c435c5bf6>  <https://web.microsoftstream.com/video/a22a5ec9-ea62-436e-9cdf-6e3bc6821cc0>  <https://web.microsoftstream.com/video/23a3815f-f5eb-4891-ae1b-52b20d4d3606> |
| 8(04/05) | <https://web.microsoftstream.com/video/628dfb60-cc74-4296-b027-97cd615a1ee9> |
| 9(01/06) | <https://web.microsoftstream.com/video/9467173d-b22f-4b4f-9b08-4211ff0f0ef8> |

**Code 1 (20/04)**

.model small  
.stack 100  
.data  
nhap\_1 db 'Hay nhap so thu nhat: $'  
nhap\_2 db 13,10,'Hay nhap so thu hai: $'  
thongbao\_tong db 13,10, 'Tong cua hai so vua nhap la: $'  
thongbao\_nhaplai db 13,10,' Nhap lai: $'  
so\_1 db 0  
so\_2 db 0  
.code  
mainprogram proc  
;khoi tao thanh ghi DS  
mov ax,@data  
mov ds,ax  
;hien thi thong bao hay nhap so thu nhat  
thongbao1:  
mov ah,09h  
lea dx,nhap\_1  
int 21h  
;nhap so thu nhat  
nhapso1:  
mov ah,01h  
int 21h  
cmp al,13  
je sosanh\_so1  
sub al,30h ; chuyen ma ascii cua ky tu so sang so thap phan  
mov cl, al  
mov al,so\_1 ; chuyen noi dung cua bien so\_1 vao thanh ghi al  
mov bl,10  
mul bl  
add al,cl   
mov dx,ax  
mov so\_1,al  
jmp nhapso1  
sosanh\_so1:  
;cmp ax,256  
cmp dx,256  
jl thongbao2  
mov so\_1,0  
xor ax,ax  
xor bx,bx  
xor cx,cx  
xor dx,dx  
lea dx, thongbao\_nhaplai  
mov ah,09h  
int 21h  
jmp thongbao1  
thongbao2:  
mov ah,09h  
lea dx, nhap\_2  
int 21h ;hien thi noi dung hay nhap so thu 2  
  
nhapso2:  
mov ah,01h  
int 21h  
cmp al,13  
je sosanh\_so2  
sub al,30h ; chuyen ve gia tri thap phan cua ki tu so nhap vao tu ban phim  
mov cl,al  
mov al, so\_2  
mov bl,10  
mul bl  
add al,cl  
mov dx,ax  
mov so\_2,al  
jmp nhapso2  
sosanh\_so2:  
;cmp dx,256  
cmp dx,256  
jl thongbao3  
mov so\_2,0  
xor ax,ax  
xor bx,bx  
xor cx,cx  
xor dx,dx  
lea dx, thongbao\_nhaplai  
mov ah,09h  
int 21h  
jmp thongbao2  
thongbao3:  
;hien thi ket qua tinh tong cua 2 so vua nhap la  
mov ah,09h  
lea dx,thongbao\_tong  
int 21h  
;tinh tong cua 2 so vua nhap  
mov al,so\_1  
sub al,so\_2; al = so\_1 - so\_2  
; thuc hien hien thi noi dung ket qua phep cong len man hinh  
mov cx,0  
mov bl,10  
mov ah,0  
chia:  
div bl  
push ax  
inc cx  
cmp al,0  
je hienthiketqua   
mov ah,0  
jmp chia  
hienthiketqua:  
pop ax  
mov dl,ah ; ah chua phan du can hien thi len man hinh  
add dl,30h ; chuyen sang ma ascii cua ki tu so  
mov ah,02h  
int 21h  
loop hienthiketqua  
;tro ve dos  
mov ah,4ch  
int 21h  
mainprogram endp  
end mainprogram

**Code 2 (20/04)**

.model small  
.stack 100  
.data  
tbnhapso db 'Nhap so thu nhat : $'  
tbketquanhiphan db 13,10,'Chuoi nhi phan cua so vua nhap la : $'  
so dw 0  
.code  
mainprogram proc   
;khoi tao thanh ghi ds  
mov ax,@data  
mov ds,ax  
; hien thi thong bao nhap so thu nhat  
hienthitb1:  
lea dx, tbnhapso  
mov ah,9  
int 21h  
;nhap so thu nhat  
nhapso:  
mov ah,01h  
int 21h  
cmp al,13  
je hienthitb2  
mov cl,al  
mov ch,0  
sub cl,30h  
mov ax,so  
mov bx,10  
mul bx  
add ax,cx  
mov so,ax  
jmp nhapso  
hienthitb2:  
lea dx, tbketquanhiphan  
mov ah,9  
int 21h ; hien thi thong bao chuoi nhi phan cua so vua nhap la  
; thuc hien tinh chuoi nhi phan cua so vua nhap  
nhiphan:  
mov cx,0  
mov bx,2  
mov ax,so   
chia:  
mov dx,0  
div bx  
add dx,30h ; chuyen sang ma ascii cua ki tu so  
push dx  
inc cx ; tang bo dem len 1  
cmp ax,0  
je insonhiphan  
jmp chia  
insonhiphan:  
pop dx  
mov ah,2  
int 21h  
loop insonhiphan  
done:  
mov ah,4ch  
int 21h   
mainprogram endp  
end mainprogram

**Code 3 (20/04)**

.model small  
.stack 100  
.data  
tb1 db 'he is a baby'  
tb2 db 'he is a boy'  
tb3 db 'he is a man'  
tb4 db 'he is retired'  
x db 6  
.code  
main proc  
;khoi tao thanh ghi DS  
mov ax,@data  
mov ds,ax  
; so sanh bien x voi 3  
cmp x,3  
ja boy  
; hien thi noi dung he is a baby  
mov ah,09h  
lea dx,tb1  
int 21h ; tuong ung voi printf("he is a baby")  
jmp ra  
boy:  
cmp x,18  
ja man  
; hien thi noi dung he is a man  
mov ah,09h  
lea dx,tb2  
int 21h ; tuong ung voi printf('he is a boy')  
jmp ra  
man:  
cmp x,60  
ja retired  
;hien thi noi dung he is a man  
mov ah,09h  
lea dx,tb3  
int 21h ; tuong ung voi printf('he is a man')  
jmp ra  
retire:  
;hien thi noi dung he is retired  
mov ah,09h  
lea dx,tb4  
int 21h ; tuong ung voi printf('he is retired')  
ra:  
mov ah,4ch  
int 21h  
main endp  
end main

**Code 4 (20/04)**

.model small  
.stack 100  
.data  
mang dw 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15  
dem dw 15  
X dw 6  
vitri\_X db -1  
.code  
main proc  
;khoi tao thanh ghi DS  
mov ax,@data  
mov ds,ax  
; goi chuong trinh con  
call findfirst  
main endp  
findfirst proc  
push ax  
push bx  
push cx  
push dx  
; gan bien dem vao thanh ghi cx  
lea bx, dem  
mov cx, [bx]  
dec cx  
add cx,cx ;cx = 2\*cx  
; gan bien x vao thanh ghi dx  
lea bx, x  
mov dx, [bx]  
; gan vi tri phan tu dau cua bien "mang" vao thanh ghi si  
lea si, mang ; ds:si  
; tao dieu kien cho vong lap  
xor bx,bx  
add cx,si  
add si,bx  
chuyen:  
mov ax,[si]  
;so sanh phan tu cua mang voi bien X  
cmp ax,dx  
je timvitri\_X  
inc bx  
add si,2  
cmp si,cx  
ja ra  
jmp chuyen  
timvitri\_X:  
lea si,vitri\_X  
inc bx  
mov [si],bx  
ra:  
pop dx  
pop cx  
pop bx  
pop ax  
ret  
findfirst endp  
end main