```
.MODEL SMALL
.STACK 100H
.DATA
A DB "ENTER FIRST NUMBER: $"

B DB "ENTER SECOND NUMBER: $"
C DB "SUM: $"
.CODE
MAIN PROC
    MOV AX,@DATA
    MOV DS,AX

    LEA DX,A
    MOV AH,9
    INT 21H

    MOV AH,1
    INT 21H

    MOV BL,AL

    ;NEXT LINE
    MOV AH,2
    MOV DX,0AH
    INT 21H
    MOV DX,0DH
    INT 21H

    LEA DX,B
    MOV AH,9
    INT 21H

    MOV AH,1     ;AL
    INT 21H

    MOV CL,AL

     MOV AH,2
    MOV DX,0AH
    INT 21H
    MOV DX,0DH
    INT 21H

    LEA DX,C
    MOV AH,9
    INT 21H

    ADD CL,BL
```

```
    MOV AH,2
    MOV DL,CL
    SUB DL,48
    INT 21H
```

; greater

```
 .MODEL SMALL
.STACK 100H
.DATA
A DB "A IS GREATER $"

B DB "A IS NOT GREATER $"
C DB "SUM: $"
.CODE
MAIN PROC
    MOV AX,@DATA
    MOV DS,AX

    MOV AX,2
    MOV BX,4
    CMP AX,BX   ; A==BX
    JG IF
    LEA DX, B
    MOV AH,9
    INT 21H
    JMP EXIT

    IF:
    LEA DX, A
    MOV AH,9
    INT 21H

    EXIT:
```

Double digit output:

```
.MODEL SMALL
.STACK 100H
.DATA
A DB "A IS GREATER $"

B DB "A IS NOT GREATER $"
C DB "SUM: $"
.CODE
MAIN PROC
    MOV AX,@DATA
    MOV DS,AX

    ; 2 digit output

    mov ah,1
    int 21h

    ;al
    sub al,48
    mov bl,al

    mov ah,1
    int 21h

    sub al,48
    mov ah,0

    mul bl


    mov cl,10
    div cl
    mov ch,ah
    ;al -> doshok
    ; ah-> ekok

    ;15
    mov dl,al
    add dl,48
```

```
    mov ah,2
    int 21h

    mov dl,ch
    add dl, 48
    mov ah,2
    int 21h


    ;use same method of input for example
10 means 1*10+0=10
 56 means 5*10+6=56
```

Max:

```
.MODEL SMALL
.STACK 100H
.DATA
A DB "A IS GREATER $"

B DB "A IS NOT GREATER $"
max Dw ?
.CODE
MAIN PROC
    MOV AX,@DATA
    MOV DS,AX

    ; ax=4,bx=5,cx=7
    mov ax,2
    mov bx,9
    mov cx,7

    cmp ax,bx
    jg if
    mov max,bx
    jmp exit

    if:
```

```
    mov max,ax
    exit:

    mov dx,max
    cmp dx,cx
    jg if2
    mov dx,cx
    add dx,48
    mov ah,2
    int 21h
    jmp exit2


    if2:
    add dx,48
    mov ah,2
    int 21h

    exit2:
```

```
.MODEL SMALL
.STACK 100H
.DATA
A DB ?

B DB ?
```

```
first Db ?

; fraction addition

.CODE
MAIN PROC
    MOV AX,@DATA
    MOV DS,AX

    ; ax=4,bx=5,cx=7
  mov ah,2
  mov al,3  ;2/3+5/3= 21/9
  mov a,al

  mov ch,ah

  mov bh,5
  mov bl,3 ;4/3

  mul bl

  mov first,al ; first ans
  mov al,ch
  mul bl

  mov b,al  ; second 1st
  mov al,a
  mul bh

  mov ah,b
  add al,ah
  mov ah,first



  .MODEL SMALL
.STACK 100H
.DATA
A DB ?

B DB ?
first Db ?
.CODE
MAIN PROC
    MOV AX,@DATA
    MOV DS,AX

    ; (3*4/12)+24-10*24
```

```
mov ax, 342
mov bx,12
div bx    ; dx
add dx,24

mov ax,24
mov ch,10
mul ch
sub dx,ax
```