.model small

.data

var dw ?

var1 dw ?

result dw ?

msg db 10,13,"enter first number->>>$"

msg1 db 10,13,"enter second number->>$"

msg2 db 10,13,"result->>$"

prins macro msg

mov dx,offset msg

mov ah,09h

int 21h

endm

prin macro var

mov dx,var

mov ah,02h

int 21h

endm

.code

mov ax,@data

mov ds,ax

prins msg

mov ah,01h

int 21h

mov bh,al

sub bh,30h

cmp bh,09h

jc up

sub bh,07h

up:

mov cl,04

and bh,0fh

rol bh,cl

mov ah,01h

int 21h

sub al,30h

cmp al,09h

jc down

sub al,07h

down:

add bh,al

mov ah,01h

int 21h

mov bl,al

sub bl,30h

cmp bl,09h

jc up1

sub bl,07h

up1:

mov cl,04

and bl,0fh

rol bl,cl

mov ah,01h

int 21h

sub al,30h

cmp al,09h

jc down1

sub al,07h

down1:

add bl,al

mov var,bx

prins msg1

mov ah,01h

int 21h

mov bh,al

sub bh,30h

cmp bh,09h

jc u1p

sub bh,07h

u1p:

mov cl,04

and bh,0fh

rol bh,cl

mov ah,01h

int 21h

sub al,30h

cmp al,09h

jc do1wn

sub al,07h

do1wn:

add bh,al

mov ah,01h

int 21h

mov bl,al

sub bl,30h

cmp bl,09h

jc u1p1

sub bl,07h

u1p1:

mov cl,04

and bl,0fh

rol bl,cl

mov ah,01h

int 21h

sub al,30h

cmp al,09h

jc dow1n1

sub al,07h

dow1n1:

add bl,al

mov var1,bx

add bx,var

mov result,bx

prins msg2

mov dx,bx

mov cl,04

ror dh,cl

and dh,0fh

cmp dh,09h

jc l11

add dh,37h

jmp l1

l11:

add dh,30h

l1:

mov cl,dh

prin cx

mov dx,bx

and dh,0fh

cmp dh,09h

jc l22

add dh,37h

jmp l2

l22:

add dh,30h

l2:

mov cl,dh

prin cx

mov dx,bx

mov cl,04

ror dl,cl

and dl,0fh

cmp dl,09h

jc l33

add dl,37h

jmp l3

l33:

add dl,30h

l3:

mov ah,02h

int 21h

mov dx,bx

and dl,0fh

cmp dl,09h

jc l44

add dl,37h

jmp l4

l44:

add dl,30h

l4:

prin dx

jmp exit

exit:

mov ah,4ch

int 21h

end