Assignment 5

include 'emu8086.inc'

.model small

.code

print 'Digits? '

mov ah,01h

int 21h ;digits number stored in al

printn

mov cx,0

mov cl,al

sub cl,'0' ; store that number in cx for controlling the loop

print 'Give the number '

mov ax,0 ; initially previous value is set to 0

input:

mov dx,ax ; keeping previous value in dx

mov ah,01h

int 21h ; collecting digit

sub al,'0'

mov bx,0

mov bl,al ; digit is stored in bx

mov ax,dx ; collect previous value

mov dx,10

mul dx ; forming the number multiplying by 10

add ax,bx

loop input

printn

printn

mov bx,ax ; keep the number in bx

print 'Give the divider number '

mov ah,01h ; collecting number in al

int 21h

mov ah,0

sub al,'0'

mov cx,ax ; keep divider in cx

printn

mov ax,bx ; collect number from stack

div cx ; dividing ax by cx

cmp dx,0 ; stored the remainder in dx

je no\_remain

jmp remain

no\_remain:

printn 'divisible'

jmp skip

remain:

printn 'not divisible'

skip: