1.

.model small

.stack 100h

.data

.code

main proc

mov DL, 'A'

print:

mov AH,02H

int 21H

mov BL, DL

mov DL, 10

int 21h

mov DL, 13

int 21h

mov DL, BL

cmp DL, 'Z'

je exit

add DL, 1

jmp print

exit:

mov AH,4CH

int 21h

2.

a. .model small

.stack 100h

.data

.code

main proc

cmp ax,0

jl Loop1

jmp end\_if

Loop1:

mov Bx,-1

b. .model small

.stack 100h

.data

.code

main proc

cmp al,0

jl Loop2

jmp Loop3

Loop2:

mov ah,0FFh

jmp end\_if

Loop3:

mov ah,0

jmp end\_if

end\_if:

mov ah,4ch

int 21h

main endp

end main

c.

.model small

.stack 100h

.data

msg db "o$"

msg2 db "e$"

.code

main proc

mov ax,@data

mov ds,ax

mov bx,4

cmp bx,0

jmp if\_

jmp else\_

if\_:

mov dl,1

mov dl,3

mov ah,9

lea dx, msg

int 21h

jmp end

else\_:

mov dl,2

mov dl,4

mov ah,9

lea dx, msg2

int 21h

jmp end

end:

mov ah,4ch

int 21h

main endp

end main

3.

.model small

.stack 100h

.data

msg db "Enter a lower case letter:$"

.code

main proc

mov ax,@data

mov ds,ax

mov ah,9

lea dx,msg

int 21h

mov ah,1

int 21h

sub al,32

mov ah,2

mov dl,al

int 21h

mov ah,4ch

int 21h

main endp

end main

4.

.model small

.stack 100h

.data

num db 2,3,4

.code

main proc

mov ax,@data

mov ds,ax

mov al,[num]

add al,[num+1]

add al,[num+2]

mov ah,02

add al,30h

mov dl,al

int 21h

mov ah,4ch

int 21h

main endp

end main

5.

.model small

.stack 100h

.data

.code

main proc

mov ah,2

mov dl,'M'

int 21h

mov ah,2

mov dl,'A'

int 21h

mov ah,2

mov dl,'H'

int 21h

mov ah,2

mov dl,'I'

int 21h

mov ah,2

mov dl,'R'

int 21h

mov dl,10

int 21h

mov dl,13

int 21h

mov ah,2

mov dl,'1'

int 21h

mov ah,2

mov dl,'9'

int 21h

mov ah,2

mov dl,'-'

int 21h

mov ah,2

mov dl,'4'

int 21h

mov ah,2

mov dl,'1'

int 21h

mov ah,2

mov dl,'4'

int 21h

mov ah,2

mov dl,'4'

int 21h

mov ah,2

mov dl,'0'

int 21h

mov ah,2

mov dl,'-'

int 21h

mov ah,2

mov dl,'3'

int 21h

mov dl,10

int 21h

mov dl,13

int 21h

mov ah,2

mov dl,'m'

int 21h

mov ah,2

mov dl,'a'

int 21h

mov ah,2

mov dl,'h'

int 21h

mov ah,2

mov dl,'i'

int 21h

mov ah,2

mov dl,'r'

int 21h

mov ah,2

mov dl,'@'

int 21h

mov ah,2

mov dl,'g'

int 21h

mov ah,2

mov dl,'m'

int 21h

mov ah,2

mov dl,'a'

int 21h

mov ah,2

mov dl,'i'

int 21h

mov ah,2

mov dl,'l'

int 21h

mov ah,2

mov dl,'.'

int 21h

mov ah,2

mov dl,'c'

int 21h

mov ah,2

mov dl,'o'

int 21h

mov ah,2

mov dl,'m'

int 21h

mov dl,10

int 21h

mov dl,13

int 21h

mov ah,2

mov dl,'L'

int 21h

mov ah,2

mov dl,'a'

int 21h

mov ah,2

mov dl,'l'

int 21h

mov ah,2

mov dl,'m'

int 21h

mov ah,2

mov dl,'a'

int 21h

mov ah,2

mov dl,'t'

int 21h

mov ah,2

mov dl,'i'

int 21h

mov ah,2

mov dl,'a'

int 21h