**TASK 1**

.model small

.stack 100h

.data

.code

mov ax, @data

mov ds, ax

mov ax, 0

mov dl,9

add dl,30h

mov cx,10

Start:

mov ah,02h

int 21h

mov bl,dl

mov dl,32

mov ah,02h

int 21h

mov dl,bl

dec dl

loop Start

mov ah, 4ch

int 21h

end

**TASK2:**

.model small

.stack 100h

.data

.code

mov ax, @data

mov ds, ax

mov ax, 0

mov ah,01h

int 21h

mov bl,al

mov dl,10

mov ah,02h

int 21h

mov dl,bl

mov ah,02h

int 21h

mov ah, 4ch

int 21h

end

**Task3:**

.model small

.stack 100h

.data

.code

mov ax, @data

mov ds, ax

mov ax, 0

mov ah,01h

int 21h

add al,20h

add bl,al

mov dl,10

mov ah,02h

int 21h

mov dl,bl

mov ah,02h

int 21h

mov ah, 4ch

int 21h

end

**TASK4**

.model small

.stack 100h

.data

Arr word 1H,2H,3h,4h,5h,6h,7h,8h,9h

.code

mov ax, @data

mov ds, ax

mov ax, 0

mov bx,0

mov ah,01h

int 21h

sub al,30h

mov ah,0

mov cl,2

mul cl

mov bl,al

mov si,bx

mov dx,0

mov dl,byte ptr Arr[si ]

add dl,48

mov ah,02h

int 21h

mov ah, 4ch

int 21h

end

**Task 5**

.model small

.stack 100h

.data

Arr word 1H,2H,3h,4h,5h,6h,7h,8h,9h

.code

mov ax, @data

mov ds, ax

mov ax, 0

mov bx,0

mov ah,01h

int 21h

above:

cmp al,79h

ja end1

mov dl,al

mov ah,02h

int 21h

inc al

jmp above

end1:

mov ah, 4ch

int 21h

end

**Task 6**

.model small

.stack 100h

.data

Arr db 4 dup (0)

.code

mov ax, @data

mov ds, ax

mov ax, 0

mov cx,4

mov si,0

L1:

mov ah,01h

int 21h

inc al

mov Arr[si],al

inc si

loop L1

mov si,0

mov cx,4

mov dl,10

mov ah,02h

int 21h

L2:

mov dl,Arr[si]

mov ah,02h

int 21h

inc si

loop L2

mov ah,4ch

int 21h

end

**Task 7**

.model small

.stack 100h

.data

.code

mov ax, @data

mov ds, ax

mov ax, 0

mov bx,0

mov ah,dh

int 21h

sub al,48

cmp al,5

jb d

cmp al,7

jb c1

cmp al,9

jb b

mov dl,41H

mov ah,02h

int 21h

jmp end1

d:

mov dl,44H

mov ah,02h

int 21h

jmp end1

c1:

mov dl,43H

mov ah,02h

int 21h

jmp end1

b:

mov dl,42H

mov ah,02h

int 21h

end1:

mov ah, 4ch

int 21h

end

**Task 8**

.model small

.stack 100h

.data

.code

mov ax, @data

mov ds, ax

mov ax, 0

mov ah,01h

int 21h

mov ah,0

sub ax,48

mov cx,ax

mov dl,10

mov ah,02h

int 21h

L1:

mov dl,2Ah

mov bx,cx

mov cx,4

L2:

mov ah,02h

int 21h

loop L2

mov dl,10

mov ah,02h

int 21h

mov cx,bx

loop L1

mov ah,4ch

int 21h

end

**TASK 8 (b)**

.model small

.stack 100h

.data

var dw 1

.code

mov ax, @data

mov ds, ax

mov ax, 0

mov ah,01h

int 21h

mov ah,0

sub ax,48

mov cx,ax

mov bx,ax

mov dl,10

mov ah,02h

int 21h

L1:

mov dl,2Ah

mov bx,cx

mov cx,var

L3:

mov dl,32

mov ah,02h

int 21h

loop L3

mov dl,2ah

mov cx,bx

L2:

mov ah,02h

int 21h

loop L2

mov dl,10

mov ah,02h

int 21h

mov cx,bx

inc var

dec bx

loop L1

mov ah,4ch

int 21h

end