

Q1:

[org 0x0100]

jmp start

mess1: db ' ,

l1: dw 35

xpos: dw 2

ypos: dw 0

clrscr:

push es

push ax

push cx

push di

mov ax, 0xb800

mov es, ax

xor di, di

mov ax, 0720h

mov cx, 2000

cld

rep stosw

pop di

pop cx

pop ax

pop es

ret

printstr: push bp

mov bp, sp

push es

push ax

push cx

push si

push di

mov ax, 0xb800

mov es, ax

mov al, 80

mul byte [bp+10]

add ax, [bp+12]

shl ax, 1

mov di, ax

mov si, [bp+6]

mov cx, [bp+4]

mov ah, [bp+8]

cld

nextchar: lodsb

stosw

loop nextchar

pop di

pop si

pop cx

pop ax

pop es

pop bp

ret 10

```
start:
call clrscr
mov cx, 13
loop1:
mov ax, 0
push ax
mov ax, [ypos]
push ax
mov ax, 40h
push ax
mov ax, mess1
push ax
push word[l1]
call printstr
mov ax, [ypos]
inc ax
mov [ypos], ax
loop loop1
```

```
mov cx, 13
loop2:
mov ax, 35
push ax
mov ax, [ypos]
push ax
mov ax, 20h
push ax
mov ax, mess1
push ax
push word[l1]
call printstr
mov ax, [ypos]
inc ax
mov [ypos], ax
loop loop2
```

```
mov cx, 13
loop4:
mov ax, 0
push ax
mov ax, [ypos]
push ax
mov ax, 70h
push ax
mov ax, mess1
push ax
push word[l1]
call printstr
mov ax, [ypos]
inc ax
mov [ypos], ax
loop loop4
```

```
mov ax, 0x4c00
int 21h
```

Q2:

```
[org 0x0100]
jmp start
```

```
Date1: db '30/03/2017'
Date2: db '30, March 2017'
Date3: db 'Thursday, March 30, 2017'
```

```
lenDate1: dw 10
lenDate2: dw 14
lenDate3: dw 24
```

```
clrscr:
push es
push ax
push cx
push di
mov ax, 0xb800
mov es, ax
xor di, di
mov ax, 7020h
mov cx, 2000
cld
rep stosw
pop di
pop cx
pop ax
pop es
ret
printstr: push bp
mov bp, sp
push es
push ax
push cx
push si
push di
mov ax, 0xb800
mov es, ax
mov al, 80
mul byte [bp+10]
add ax, [bp+12]
shl ax, 1
mov di, ax
mov si, [bp+6]
mov cx, [bp+4]
mov ah, [bp+8]
cld
nextchar: lodsb
stosw
loop nextchar
```

```
pop di
pop si
pop cx
pop ax
pop es
pop bp
ret 10
```

start:

```
call clrscr
mov ax, 45
push ax
mov ax, 21
push ax
mov ax, 47h
push ax
mov ax, Date1
push ax
push word[lenDate1]
call printstr
```

```
mov ax, 22
push ax
mov ax, 5
push ax
mov ax, 97h
push ax
mov ax, Date3
push ax
push word[lenDate3]
call printstr
```

```
mov ax, 30
push ax
mov ax, 15
push ax
mov ax, 67h
push ax
mov ax, Date2
push ax
push word[lenDate2]
call printstr
```

```
mov ax, 0x4c00
int 21h
```