

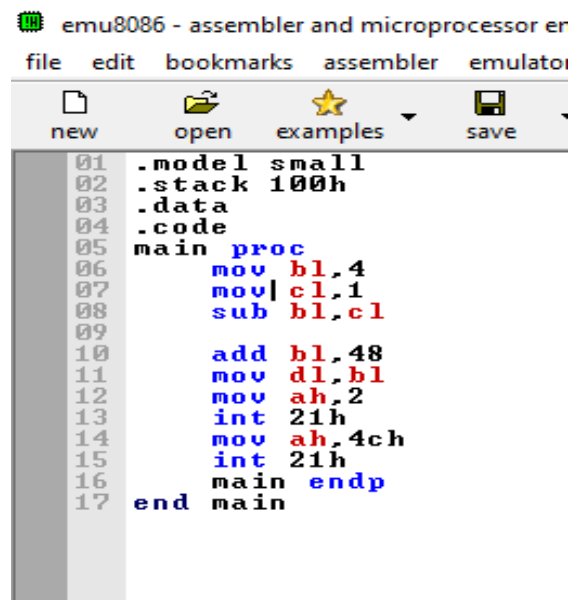
MISHAL ASIM (62516)

COAL AND ASSEMBLY LANGUAGE

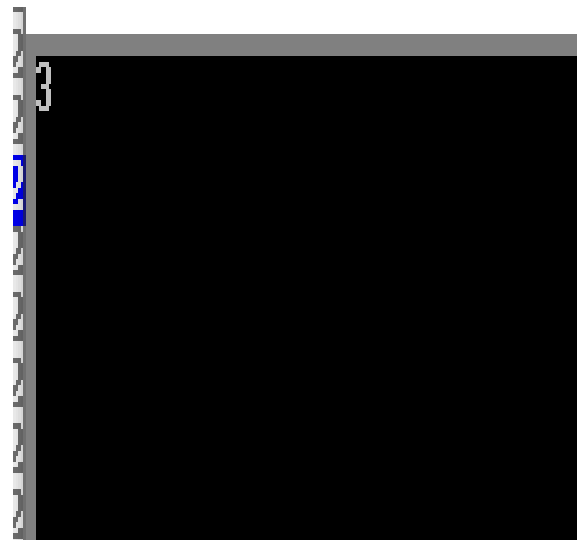
LAB 05

QUESTION 1:

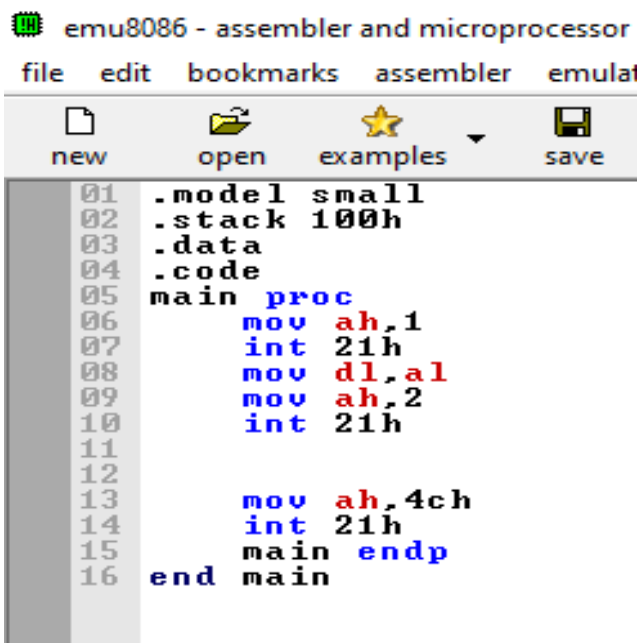
PART 1



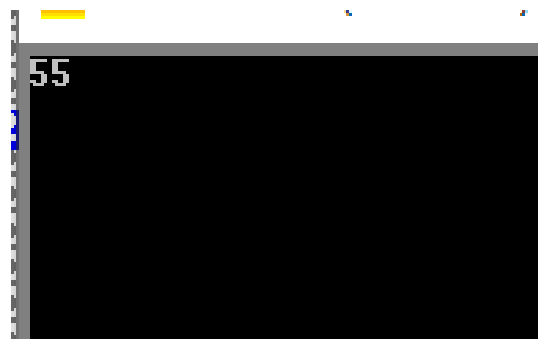
```
01 .model small
02 .stack 100h
03 .data
04 .code
05 main proc
06     mov bl,4
07     mov cl,1
08     sub bl,cl
09
10     add bl,48
11     mov dl,bl
12     mov ah,2
13     int 21h
14     mov ah,4ch
15     int 21h
16 main endp
17 end main
```



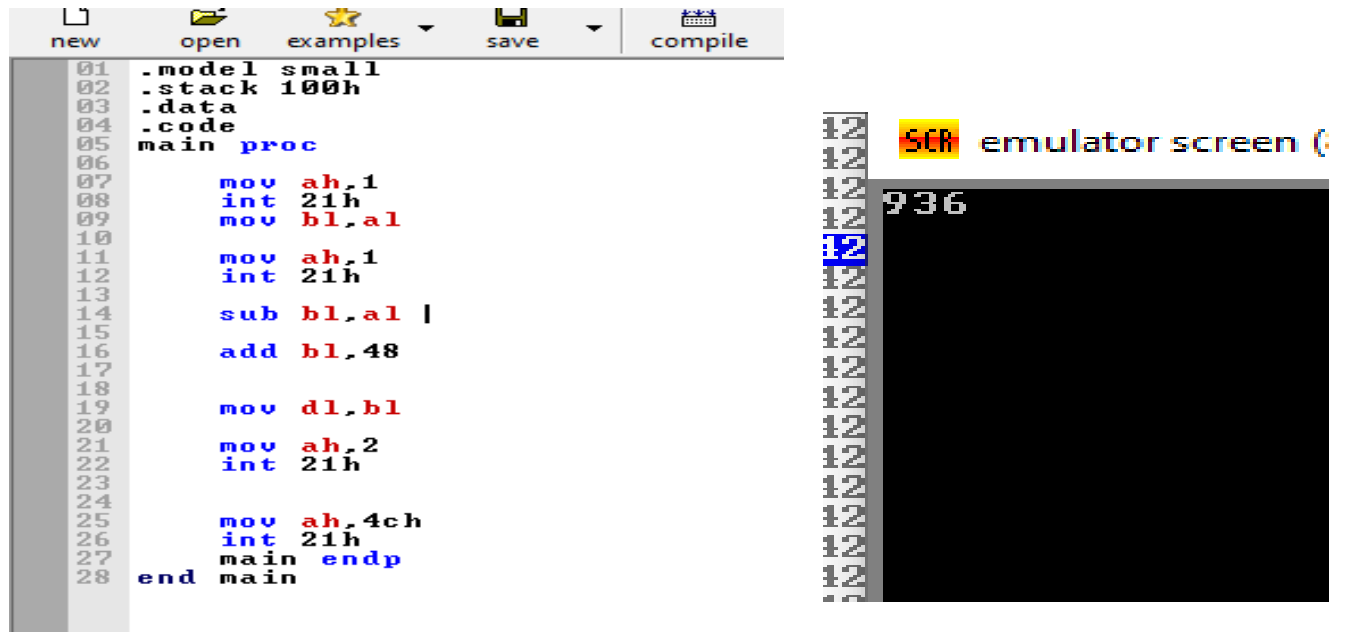
PART 2



```
01 .model small
02 .stack 100h
03 .data
04 .code
05 main proc
06     mov ah,1
07     int 21h
08     mov dl,al
09     mov ah,2
10     int 21h
11
12
13     mov ah,4ch
14     int 21h
15 main endp
16 end main
```



PART 3

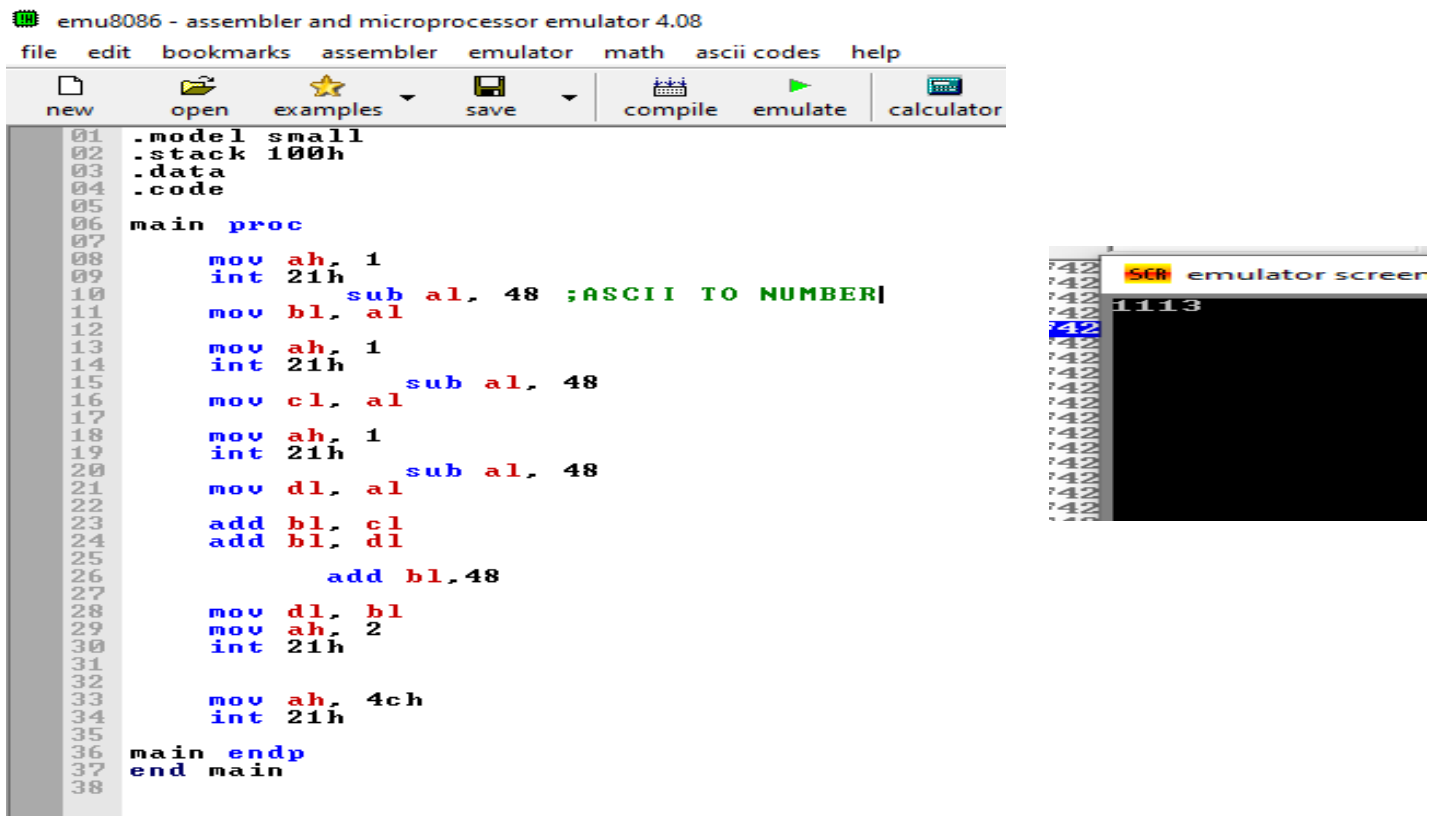


The screenshot shows an assembler window with the following assembly code:

```
01 .model small
02 .stack 100h
03 .data
04 .code
05 main proc
06
07     mov ah,1
08     int 21h
09     mov bl,al
10
11     mov ah,1
12     int 21h
13
14     sub bl,al |
15
16     add bl,48
17
18
19     mov dl,bl
20
21     mov ah,2
22     int 21h
23
24
25     mov ah,4ch
26     int 21h
27 main endp
28 end main
```

To the right, an emulator window titled "SCR emulator screen (" shows the output "936" on a black background.

QUESTION 2:

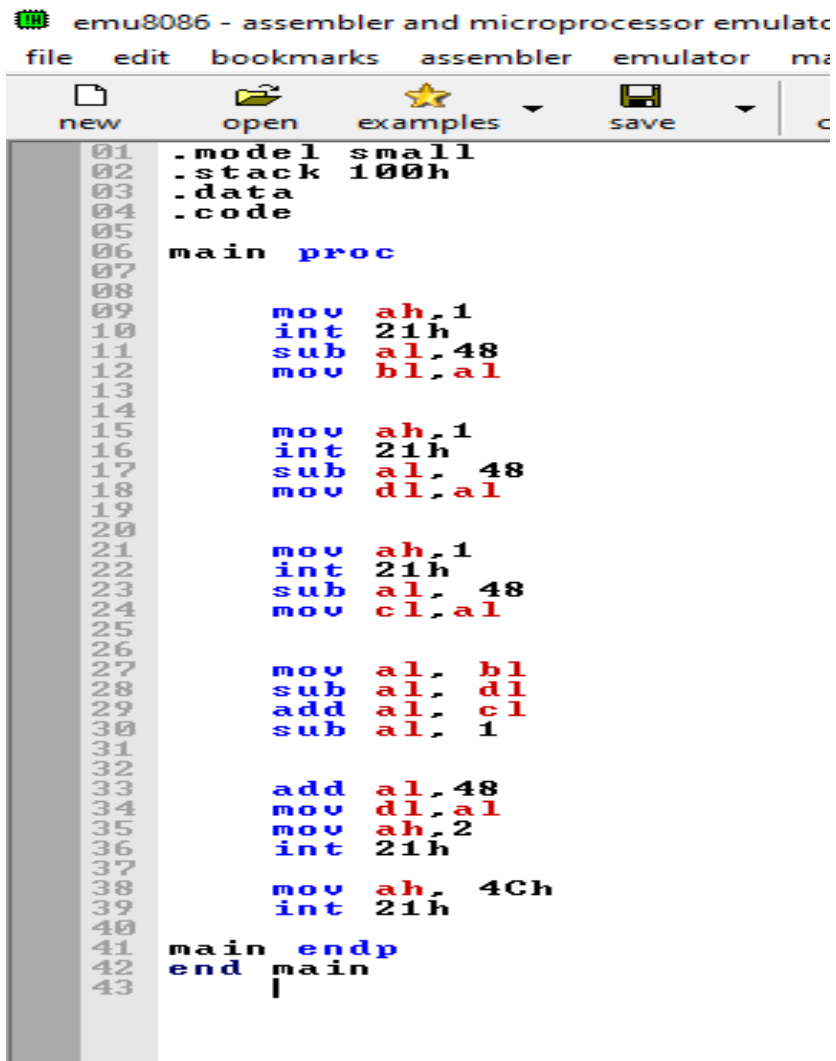


The screenshot shows the emu8086 emulator window with the following assembly code:

```
01 .model small
02 .stack 100h
03 .data
04 .code
05
06 main proc
07
08     mov ah, 1
09     int 21h
10     sub al, 48 ;ASCII TO NUMBER|
11     mov bl, al
12
13     mov ah, 1
14     int 21h
15     sub al, 48
16     mov cl, al
17
18     mov ah, 1
19     int 21h
20     sub al, 48
21     mov dl, al
22
23     add bl, cl
24     add bl, dl
25
26     add bl,48
27
28     mov dl, bl
29     mov ah, 2
30     int 21h
31
32
33     mov ah, 4ch
34     int 21h
35
36 main endp
37 end main
38
```

To the right, the emulator screen shows the output "1113" on a black background.

QUESTION 3:



```
01 .model small
02 .stack 100h
03 .data
04 .code
05
06 main proc
07
08     mov ah,1
09     int 21h
10     sub al,48
11     mov bl,al
12
13
14     mov ah,1
15     int 21h
16     sub al,48
17     mov dl,al
18
19
20     mov ah,1
21     int 21h
22     sub al,48
23     mov cl,al
24
25
26     mov al,bl
27     sub al,dl
28     add al,cl
29     sub al,1
30
31
32     add al,48
33     mov dl,al
34     mov ah,2
35     int 21h
36
37     mov ah,4Ch
38     int 21h
39
40
41 main endp
42 end main
43
```

