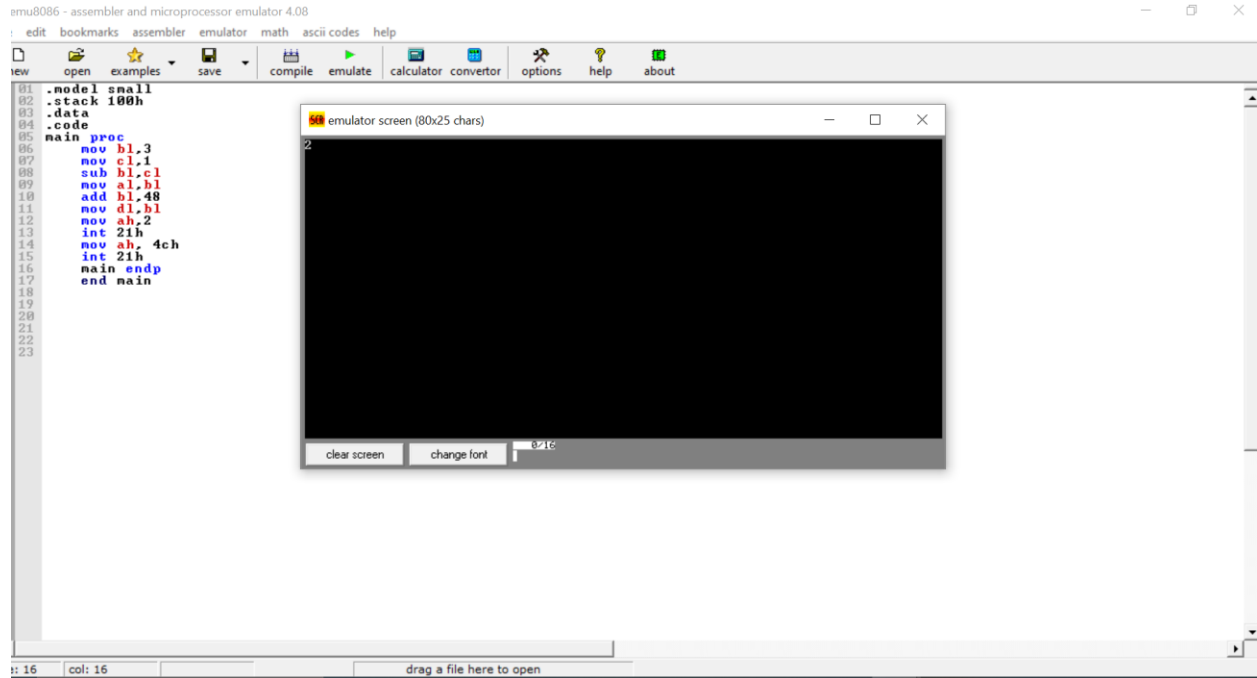


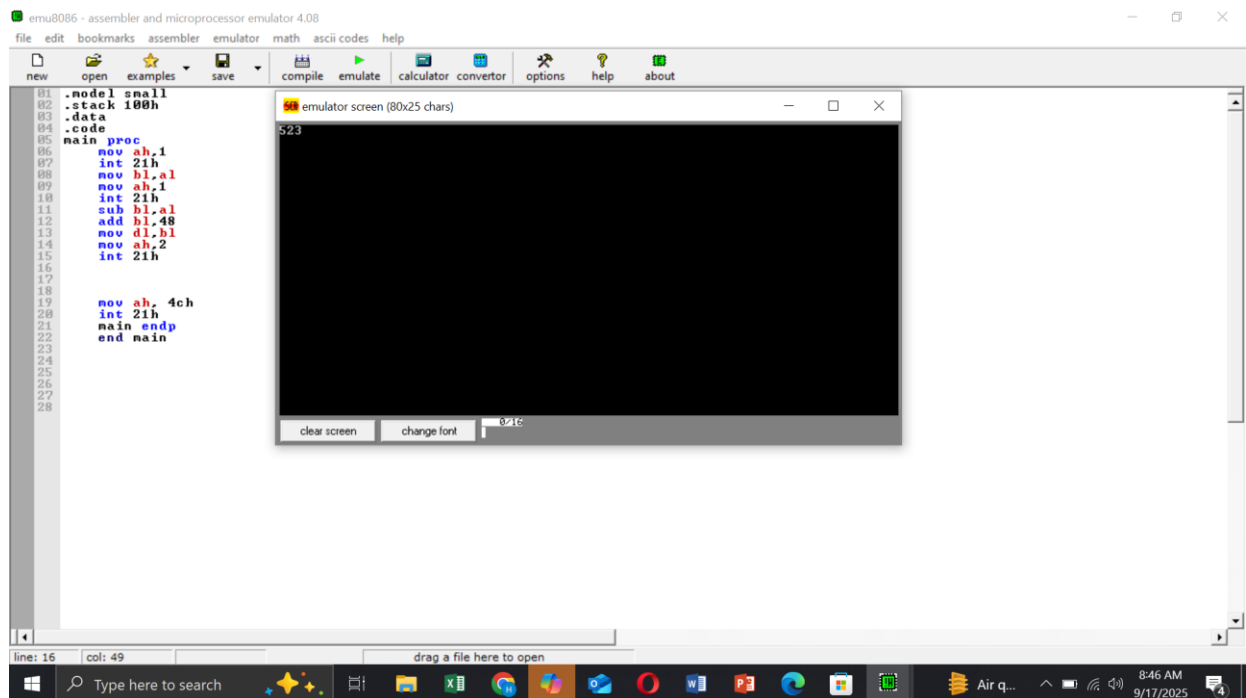
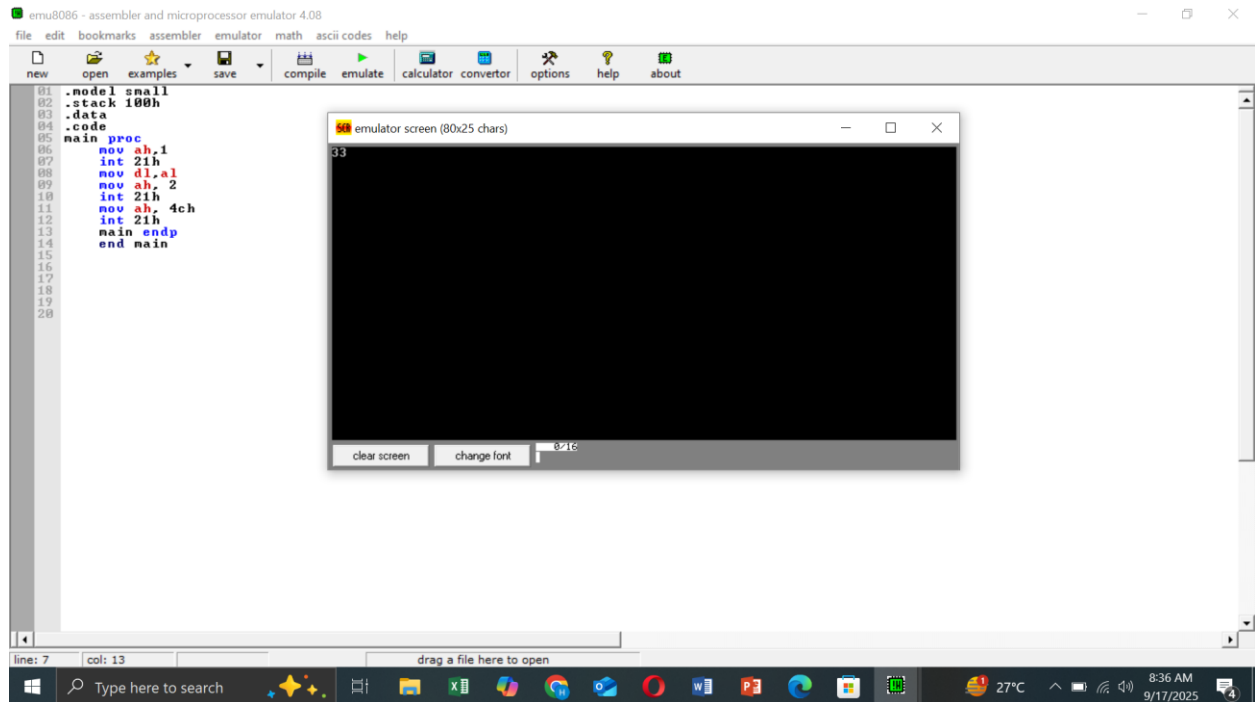
Hafsa Saghir

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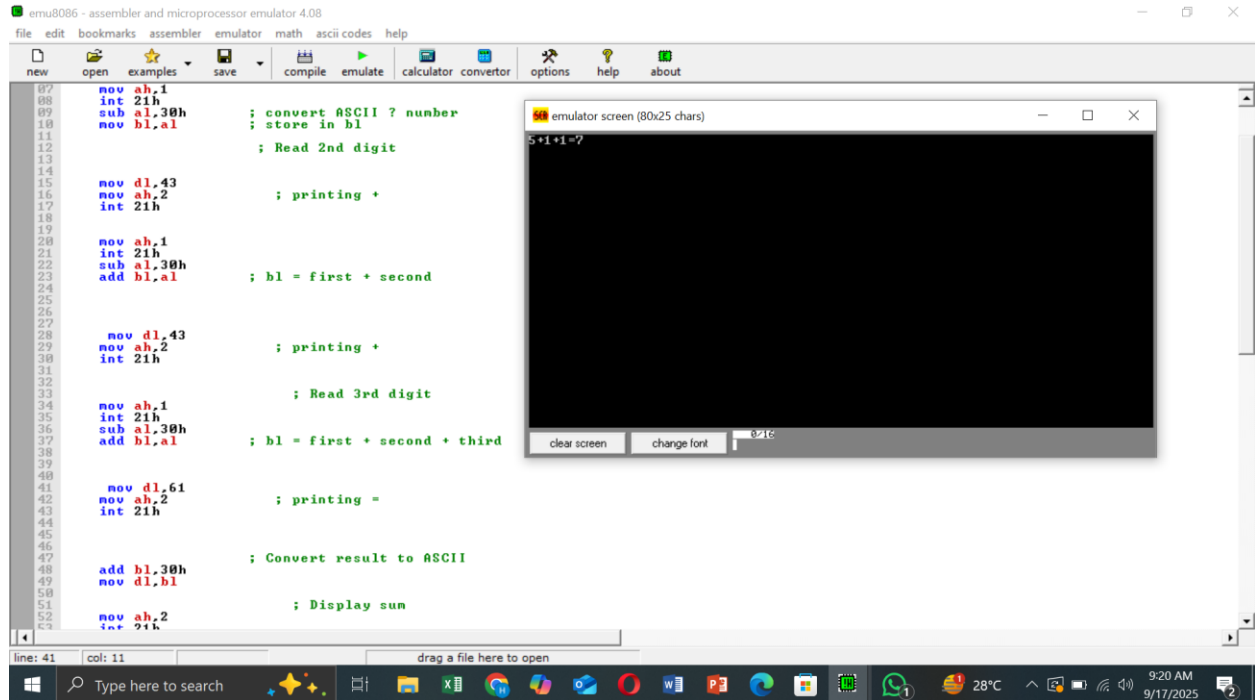
Lab 5

## Task 1:





## ask 2:

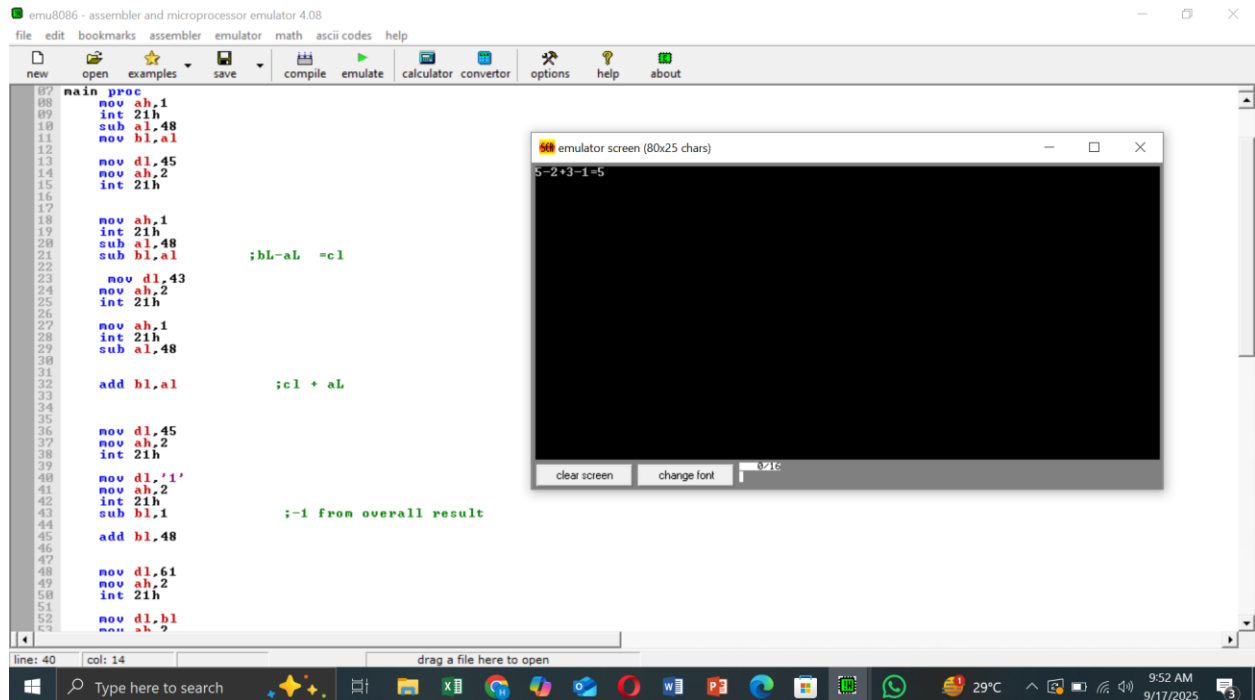


The screenshot shows the emu8086 interface with the following assembly code:

```
07 mov ah,1
08 int 21h
09 sub al,30h ; convert ASCII ? number
10 mov bl,al ; store in bl
11
12 ; Read 2nd digit
13
14
15 mov dl,43
16 mov ah,2 ; printing +
17 int 21h
18
19
20 mov ah,1
21 int 21h
22 sub al,30h
23 add bl,al ; bl = first + second
24
25
26
27 mov dl,43
28 mov ah,2 ; printing +
29 int 21h
30
31
32 ; Read 3rd digit
33
34 mov ah,1
35 int 21h
36 sub al,30h
37 add bl,al ; bl = first + second + third
38
39
40
41 mov dl,61
42 mov ah,2 ; printing =
43 int 21h
44
45
46
47 add bl,30h ; Convert result to ASCII
48 mov dl,b1
49
50
51 ; Display sum
52 int 21h
53
```

The calculator window shows the expression  $5+1+1=?$ .

## Task 3:



The screenshot shows the emu8086 interface with the following assembly code:

```
07 main proc
08 mov ah,1
09 int 21h
10 sub al,48
11 mov bl,al
12
13 mov dl,45
14 mov ah,2
15 int 21h
16
17
18 mov ah,1
19 int 21h
20 sub al,48
21 sub bl,al ;bl-al =c1
22
23
24 mov dl,43
25 mov ah,2
26 int 21h
27
28 mov ah,1
29 int 21h
30 sub al,48
31
32 add bl,al ;c1 + aL
33
34
35
36 mov dl,45
37 mov ah,2
38 int 21h
39
40 mov dl,'1'
41 mov ah,2
42 int 21h
43 sub bl,1 ;-1 from overall result
44 add bl,48
45
46
47
48 mov dl,61
49 mov ah,2
50 int 21h
51
52 mov dl,b1
53 int 21h
54 main endp
```

The calculator window shows the expression  $5-2+3-1=5$ .