



FACULTY OF COMPUTING
RIPHAH INTERNATIONAL UNIVERSITY

LAB TASK # 09

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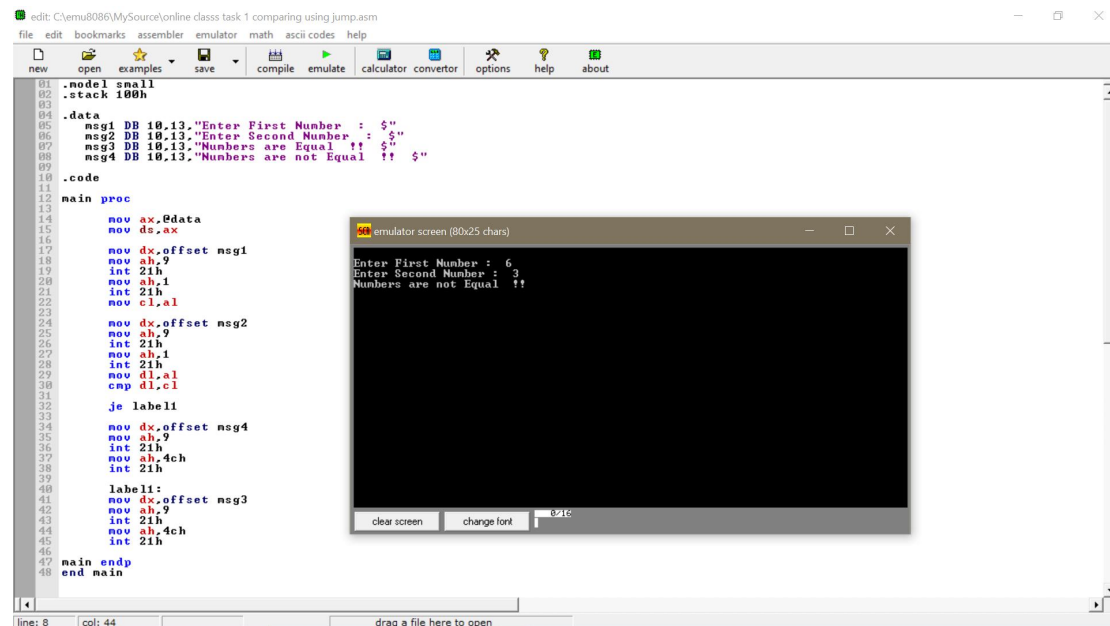
BS-SE 3rd Semester

Submitted to : Ma'am Fareeha

Date : 16/10/2024

Subject : COAL-LAB

Task : 01



```
01 .model small
02 .stack 100h
03
04 .data
05 msg1 DB 10,13,"Enter First Number : $"
06 msg2 DB 10,13,"Enter Second Number : $"
07 msg3 DB 10,13,"Numbers are Equal !! $"
08 msg4 DB 10,13,"Numbers are not Equal !! $"
09
10 .code
11
12 main proc
13
14     mov ax,@data
15     mov ds,ax
16
17     mov dx,offset msg1
18     mov ah,9
19     int 21h
20     mov ah,1
21     int 21h
22     mov cl,al
23
24     mov dx,offset msg2
25     mov ah,9
26     int 21h
27     mov ah,1
28     int 21h
29     mov dl,al
30     cmp dl,cl
31
32     je label1
33
34     mov dx,offset msg4
35     mov ah,9
36     int 21h
37     mov ah,4ch
38     int 21h
39
40 label1:
41     mov dx,offset msg3
42     mov ah,9
43     int 21h
44     mov ah,4ch
45     int 21h
46
47 main endp
48 end main
```

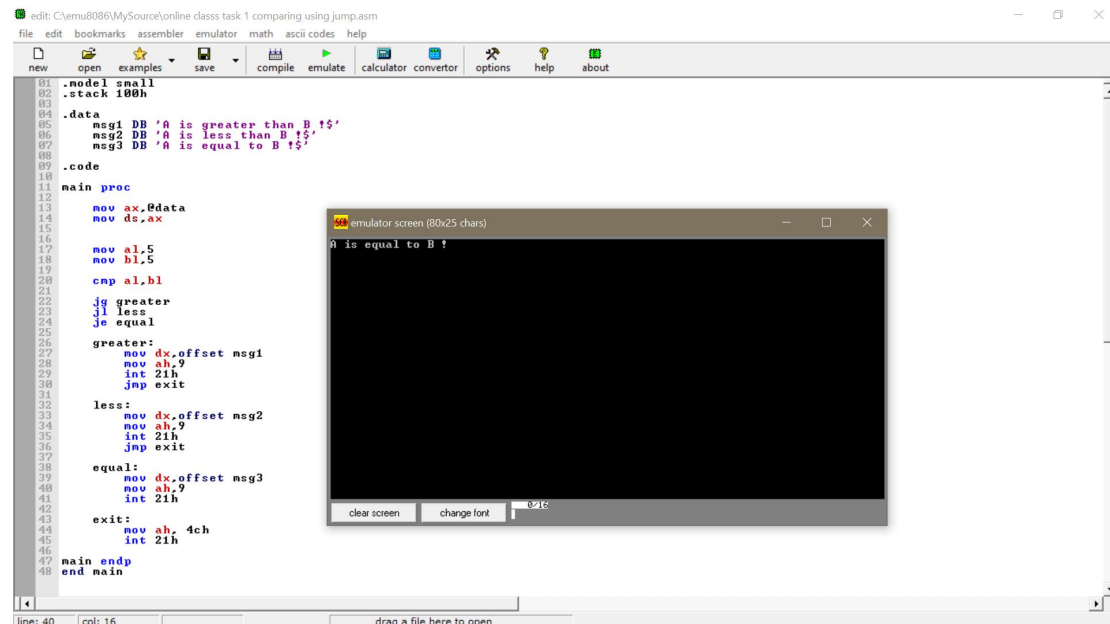
emulator screen (80x25 chars)

```
Enter First Number : 6
Enter Second Number : 3
Numbers are not Equal !!
```

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Task : 02



```
01 .model small
02 .stack 100h
03
04 .data
05 msg1 DB 'A is greater than B !$'
06 msg2 DB 'A is less than B !$'
07 msg3 DB 'A is equal to B !$'
08
09 .code
10
11 main proc
12
13     mov ax,@data
14     mov ds,ax
15
16
17     mov al,5
18     mov bl,5
19
20     cmp al,bl
21
22     jg greater
23     jl less
24     je equal
25
26 greater:
27     mov dx,offset msg1
28     mov ah,9
29     int 21h
30     jmp exit
31
32 less:
33     mov dx,offset msg2
34     mov ah,9
35     int 21h
36     jmp exit
37
38 equal:
39     mov dx,offset msg3
40     mov ah,9
41     int 21h
42
43 exit:
44     mov ah, 4ch
45     int 21h
46
47 main endp
48 end main
```

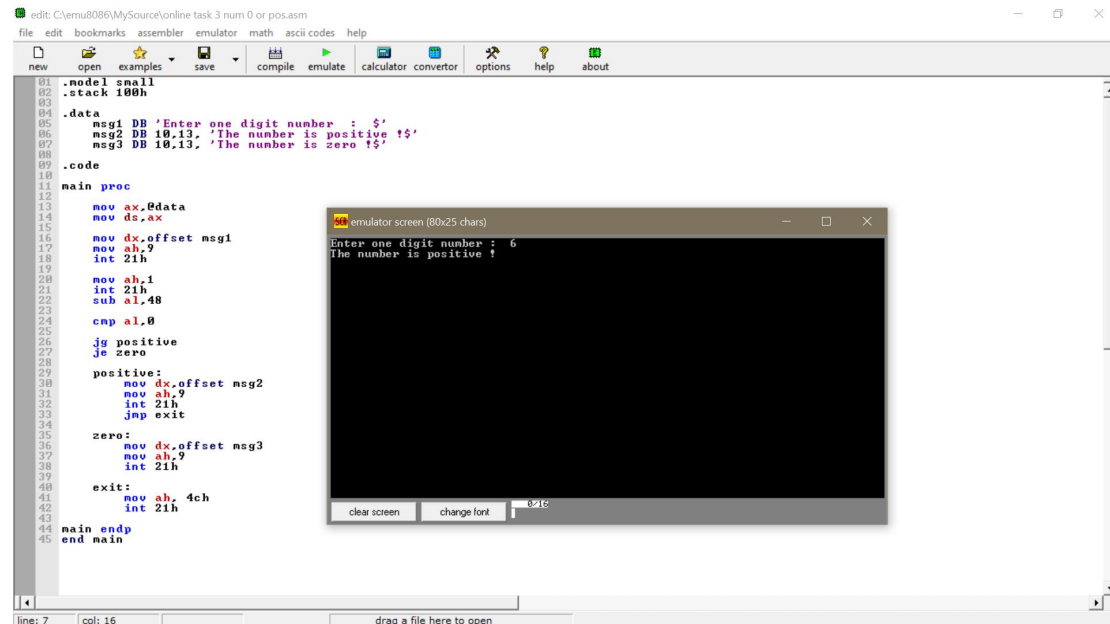
emulator screen (80x25 chars)

```
A is equal to B !
```

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Task : 03



```
edit: C:\emu8086\MySource\online task 3 num 0 or pos.asm
file edit bookmarks assembler emulator math ascii codes help

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01 .model small
02 .stack 100h
03
04 .data
05 msg1 DB 'Enter one digit number : $'
06 msg2 DB 10,13, 'The number is positive !$'
07 msg3 DB 10,13, 'The number is zero !$'
08
09 .code
10
11 main proc
12     mov ax,@data
13     mov ds,ax
14
15     mov dx,offset msg1
16     mov ah,9
17     int 21h
18
19     mov ah,1
20     int 21h
21     sub al,48
22
23     cmp al,0
24
25     jg positive
26     je zero
27
28 positive:
29     mov dx,offset msg2
30     mov ah,9
31     int 21h
32     jmp exit
33
34 zero:
35     mov dx,offset msg3
36     mov ah,9
37     int 21h
38
39 exit:
40     mov ah, 4ch
41     int 21h
42
43 main endp
44 end main
45
```

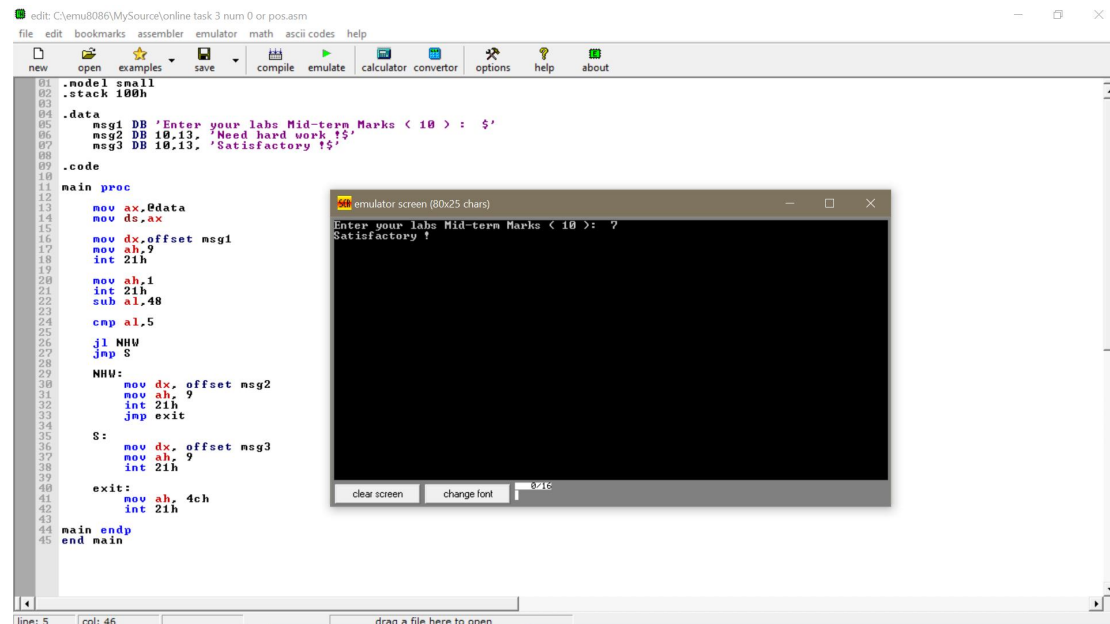
emulator screen (80x25 chars)

```
Enter one digit number : 6
The number is positive !

clear screen change font 0/16
```

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Task : 04



```
edit: C:\emu8086\MySource\online task 3 num 0 or pos.asm
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01 .model small
02 .stack 100h
03
04 .data
05 msg1 DB 'Enter your labs Mid-term Marks < 10 > : $'
06 msg2 DB 10,13, 'Need hard work !$'
07 msg3 DB 10,13, 'Satisfactory !$'
08
09 .code
10
11 main proc
12     mov ax,@data
13     mov ds,ax
14
15     mov dx,offset msg1
16     mov ah,9
17     int 21h
18
19     mov ah,1
20     int 21h
21     sub al,48
22
23     cmp al,5
24
25     jl NHV
26     jmp S
27
28 NHV:
29     mov dx, offset msg2
30     mov ah, 9
31     int 21h
32     jmp exit
33
34 S:
35     mov dx, offset msg3
36     mov ah, 9
37     int 21h
38
39 exit:
40     mov ah, 4ch
41     int 21h
42
43 main endp
44 end main
45
```

emulator screen (80x25 chars)

```
Enter your labs Mid-term Marks < 10 > : 7
Satisfactory !

clear screen change font 0/16
```

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