WHY DOSBOX:

first I will show you why we need dosbox for our project.

First of all, those who are using graphics will be needing it.

Otherwise you don't need this pdf (I hope).

This is a simple code (not simple unless you've read the first part of the chapter :v) from the book that introduces how to use graphics.

```
Code:
.model small
.stack 100h
.data
msg1 db 'Hello$'
.code
main proc
       mov ax,13h
       int 10h
       mov ah,0ch
       mov al,1
       mov cx,301
       mov dx,100
li:
       int 10h
       inc cx
       cmp cx,600
       jle li
       mov ah,0
       int 16h
       mov ax,3
       int 10h
       mov ah,4ch
       int 21h
```

main endp

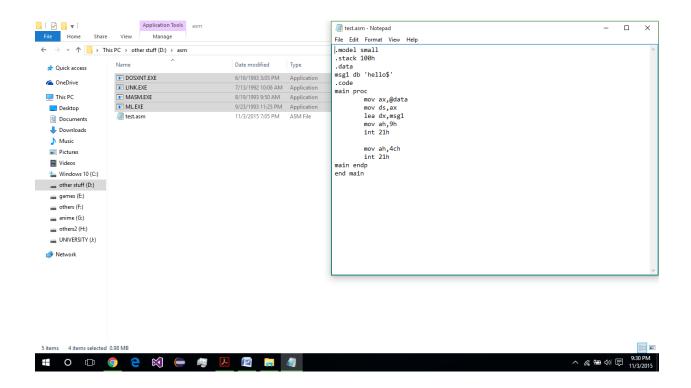
end main

there's a reason why I changed it a bit. Try running this in emu8086. If it doesn't work, please leave a comment.

If you ran it then you must've seen how slow it was. :v so if you think you can work this way, then be my guest. OR you can just follow the tutorial below.

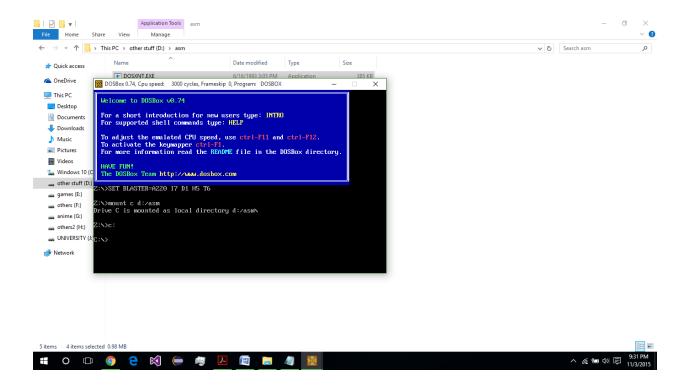
P.S.: I made necessary changes to the code so that it will run on emu8086. If you wrote it down from the book directly, it won't work.

HOW TO RUN ASSEMBLY IN DOSBOX:

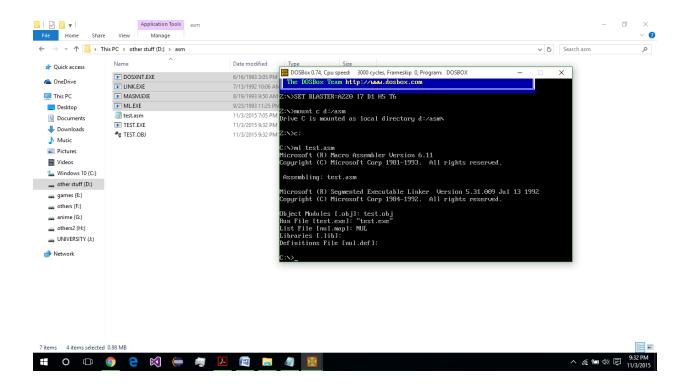


First of all, you need the highlighted files.

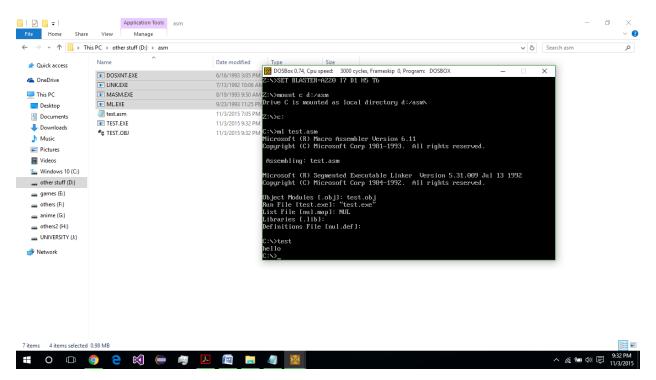
you don't need the rest right now. (oh you might also need ML.err, else it won't show you the errors in your code. Just copy the whole folder of masm.zip)



Then you mount it. You need to mount it to a drive. For example I am mounting it to C drive by writing "mount c", later I wrote an address, it's the address of the folder where my files are. You better choose the address where you copied the masm.zip's contents.



in order to compile and run a file, you need to write "ml test.asm" assuming that your asm file is named "test". What ml does is, it calls two .exe, the "masm.exe" and "link.exe". You will learn more about it in the chapter "memory management" in marut's book.



in order to run the file you just compile (test.exe for me) , you just need to write it's name.

Now, here's the thing, you can run the .exe you made in emu8086 with dosbox the same way. The steps are

mount the drive → just write the name of the code you compiled in emu8086.

Remember, you need to "compile", the "emulate" option will not create a exe file so you won't be able to run it.