

ASSEMBLY 8086 TASM

INSTALLATION AND GUIDES

Start

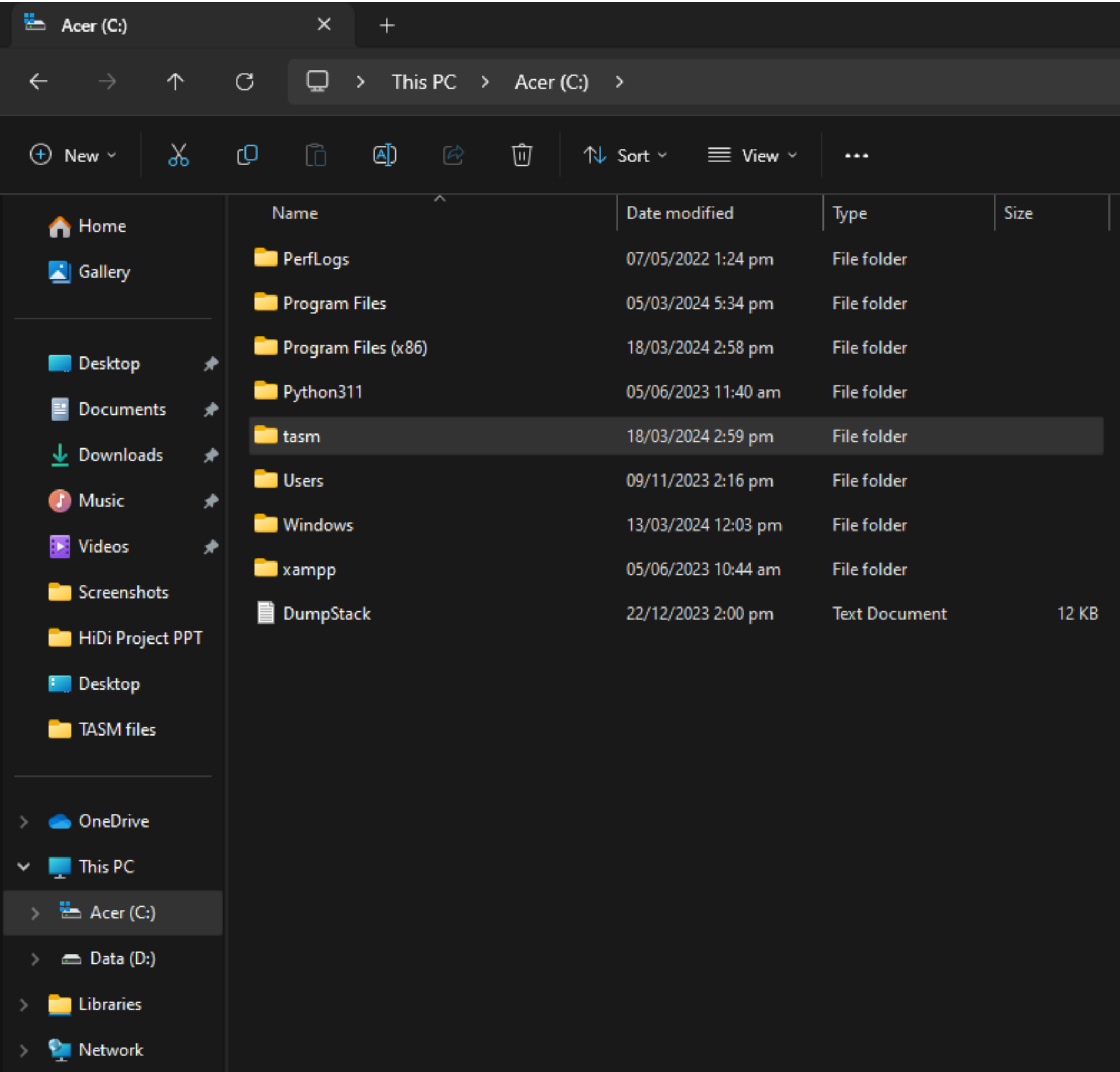
Download and Install

Step 1: Click [here](#) to download TASM

Step 2: Install Tasm 1.4 Windows 7-Windows 8 64 bit Techapple.net

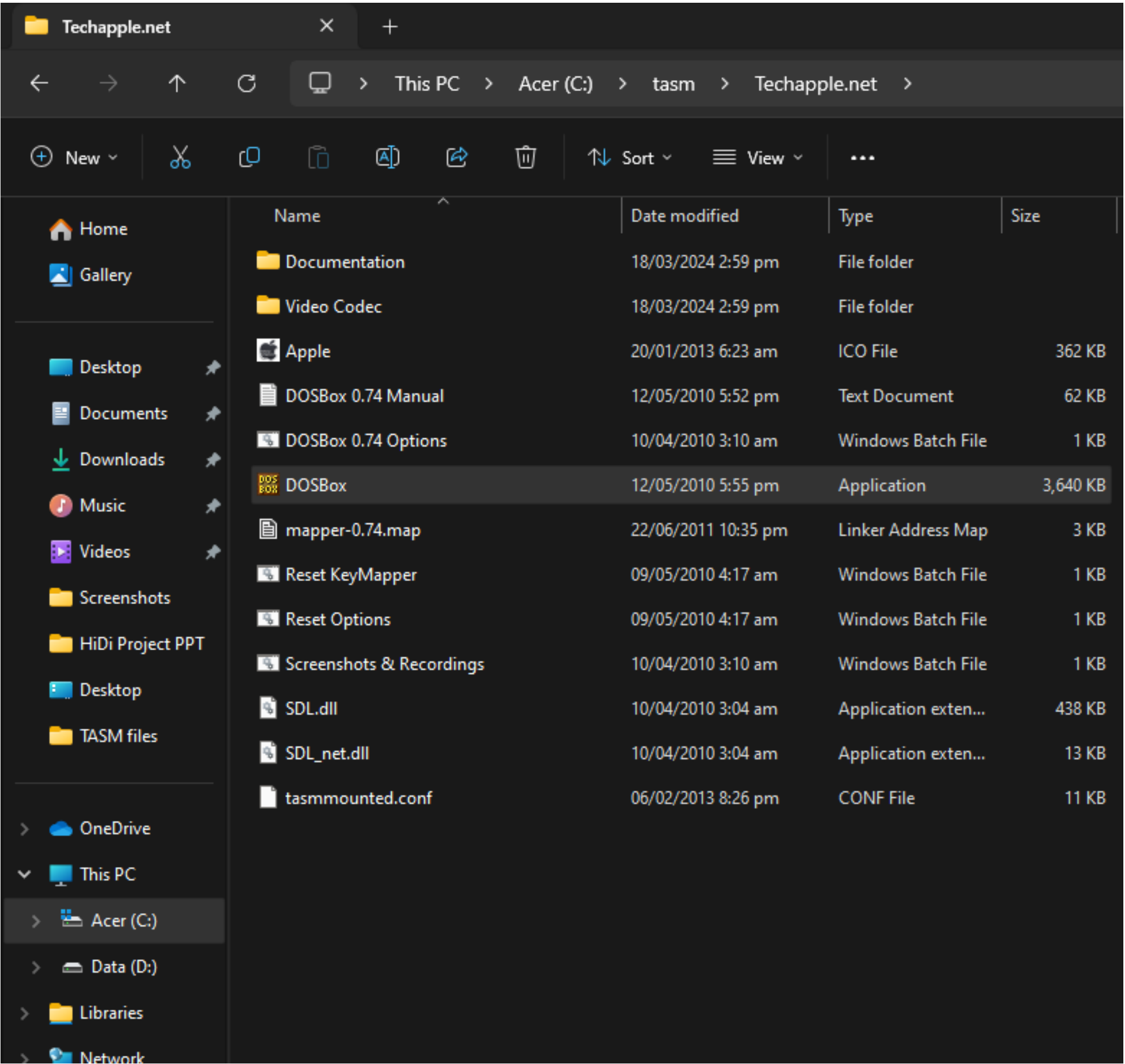
Step 3: After installing, find the Tasm 1.4 folder on Drive C:

Step 4: Rename folder into “tasm”



Set-up Configuration

- Step 5: Open “tasm” folder from Drive C:
- Step 6: Open Techapple.net folder
- Step 7: Click and Open DOSBox application file

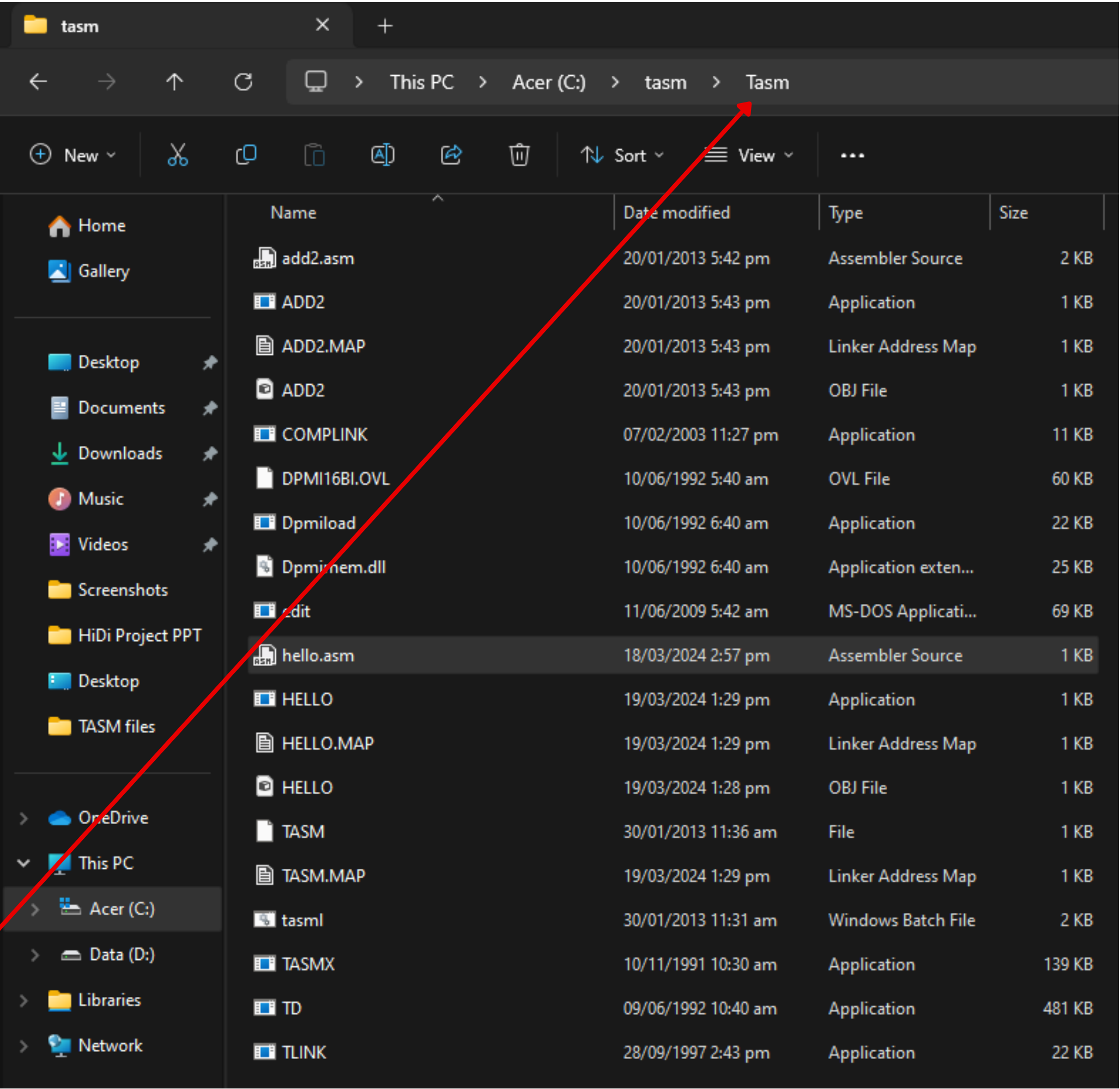


Download and Install

Step 8: Open notepad application and type the ff code;

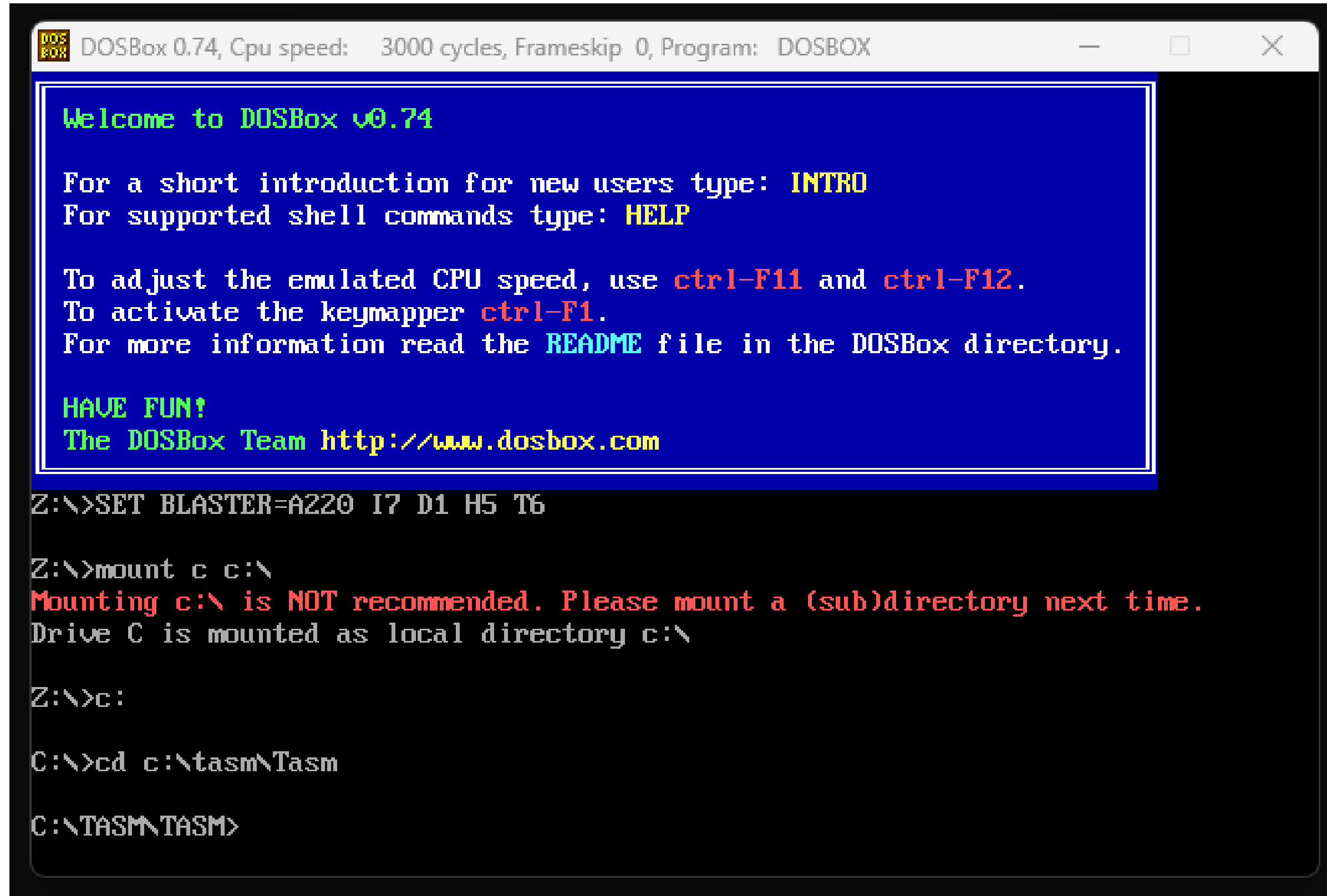
```
.model small
.stack 100h
.data
    hello db 'Hello, World!$'
.code
    mov ax, @data
    mov ds, ax
    lea dx, hello
    mov ah, 09h
    int 21h
    mov ah, 4ch
    int 21h
end
```

Step 9: Save the document as “hello.asm” on Tasm folder (not the main folder “tasm”)



Execute Sample Program

Step 10: On the DOSBox application, type in the ff;

A screenshot of the DOSBox 0.74 application window. The title bar shows 'DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX'. The main window has a blue background with white and yellow text. A white box with a blue border contains the following text: 'Welcome to DOSBox v0.74', 'For a short introduction for new users type: INTRO', 'For supported shell commands type: HELP', 'To adjust the emulated CPU speed, use ctrl-F11 and ctrl-F12.', 'To activate the keymapper ctrl-F1.', 'For more information read the README file in the DOSBox directory.', 'HAVE FUN!', and 'The DOSBox Team http://www.dosbox.com'. Below this box, the command prompt shows the following commands and output: 'Z:\>SET BLASTER=A220 I7 D1 H5 T6', 'Z:\>mount c c:\', 'Mounting c:\ is NOT recommended. Please mount a (sub)directory next time.', 'Drive C is mounted as local directory c:\', 'Z:\>c:', 'C:\>cd c:\tasm\Tasm', and 'C:\TASM\TASM>'.

```
DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX

Welcome to DOSBox v0.74

For a short introduction for new users type: INTRO
For supported shell commands type: HELP

To adjust the emulated CPU speed, use ctrl-F11 and ctrl-F12.
To activate the keymapper ctrl-F1.
For more information read the README file in the DOSBox directory.

HAVE FUN!
The DOSBox Team http://www.dosbox.com

Z:\>SET BLASTER=A220 I7 D1 H5 T6

Z:\>mount c c:\
Mounting c:\ is NOT recommended. Please mount a (sub)directory next time.
Drive C is mounted as local directory c:\

Z:\>c:

C:\>cd c:\tasm\Tasm

C:\TASM\TASM>
```

This part is about replacing the z:\ path to c:\tasm\Tasm where our assembly program is stored

Assemble and Link

Step 11: After establishing the path, type the following commands;

```
tasm <yourfilename>  
tlink <yourfilename>  
<yourfilename>
```

```
C:\TASM\TASM>tasm hello.asm  
Turbo Assembler  Version 3.0  Copyright (c) 1988, 1991 Borland International  
  
Assembling file:    hello.asm  
Error messages:     None  
Warning messages:   None  
Passes:             1  
Remaining memory:   476k  
  
C:\TASM\TASM>tlink hello  
Turbo Link  Version 2.0  Copyright (c) 1987, 1988 Borland International  
  
C:\TASM\TASM>hello  
Hello, World!  
C:\TASM\TASM>s_
```





The tasm hello.asm commands creates OBJ file

You can see the number of error here

The tlink hello create the linker address map file and exe file

Calling the file name executes the program

APPENDIX

 hello.asm	19/03/2024 2:11 pm	Assembler Source	1 KB
 HELLO	19/03/2024 2:12 pm	Application	1 KB
 HELLO.MAP	19/03/2024 2:12 pm	Linker Address Map	1 KB
 HELLO	19/03/2024 2:11 pm	OBJ File	1 KB

You should be able to produce these 4 document files for the assembly program

THANK YOU