

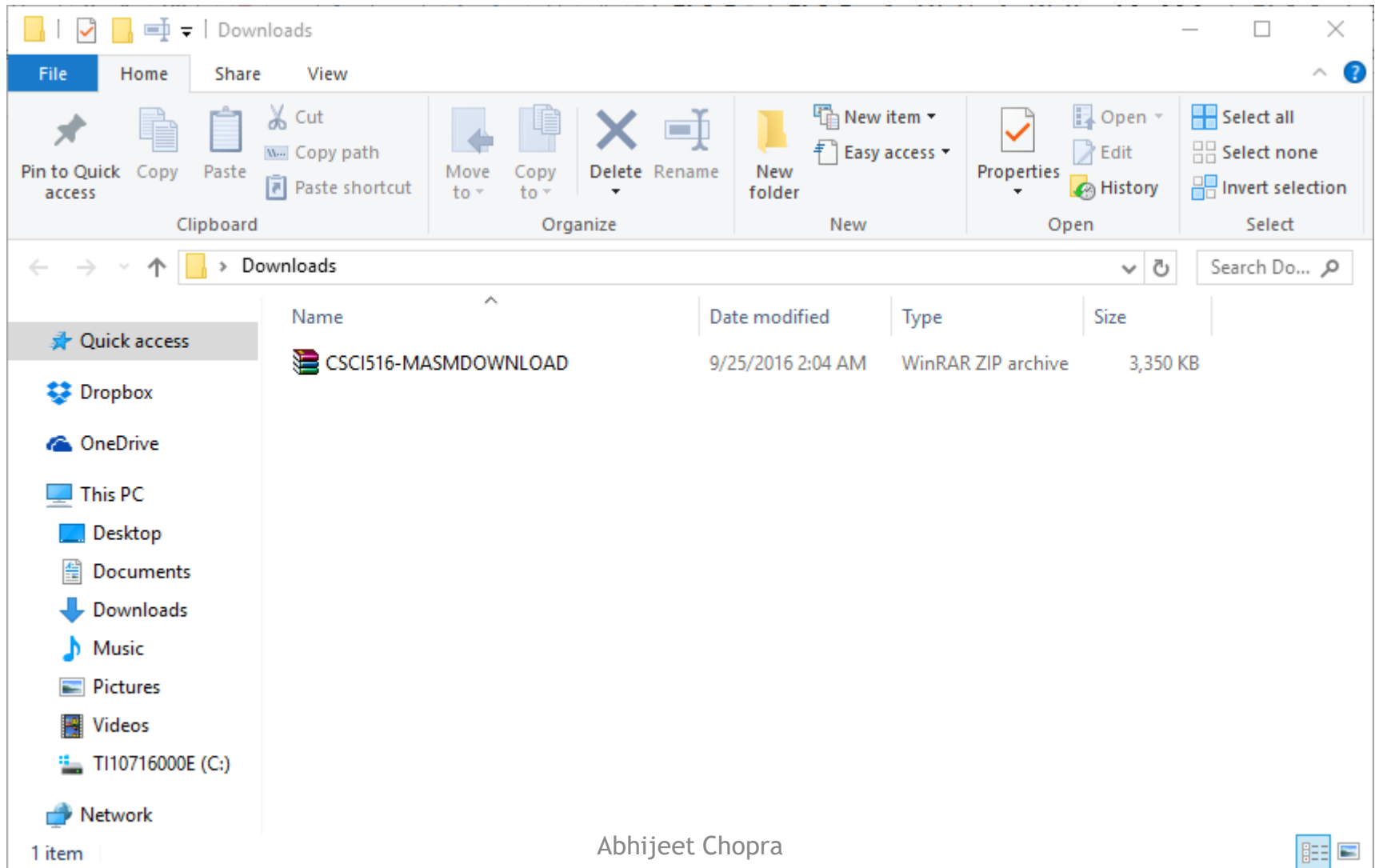
Masm615 setup

Abhijeet Chopra

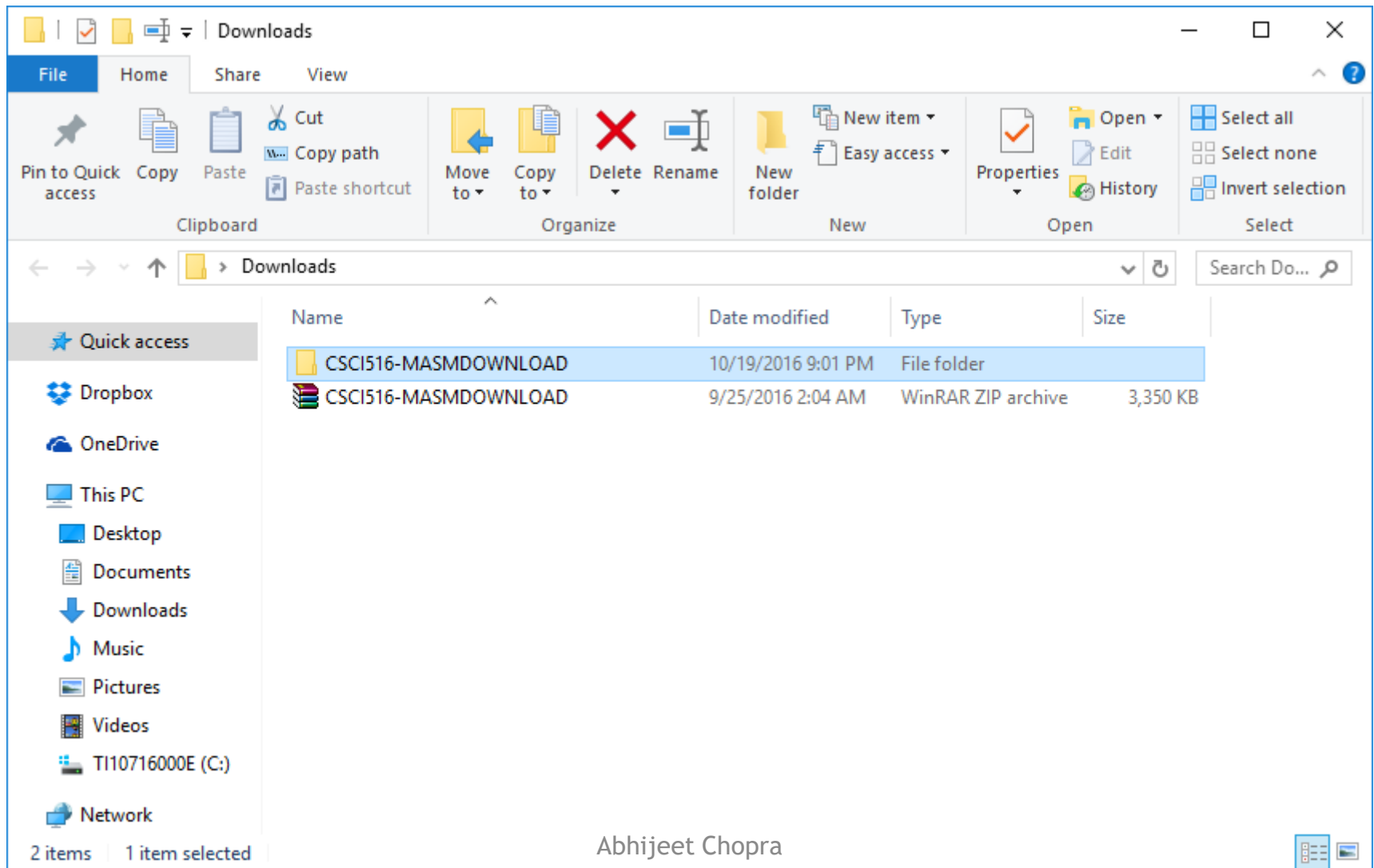
CSCI 516 Fall 2016

Texas A&M University-Commerce

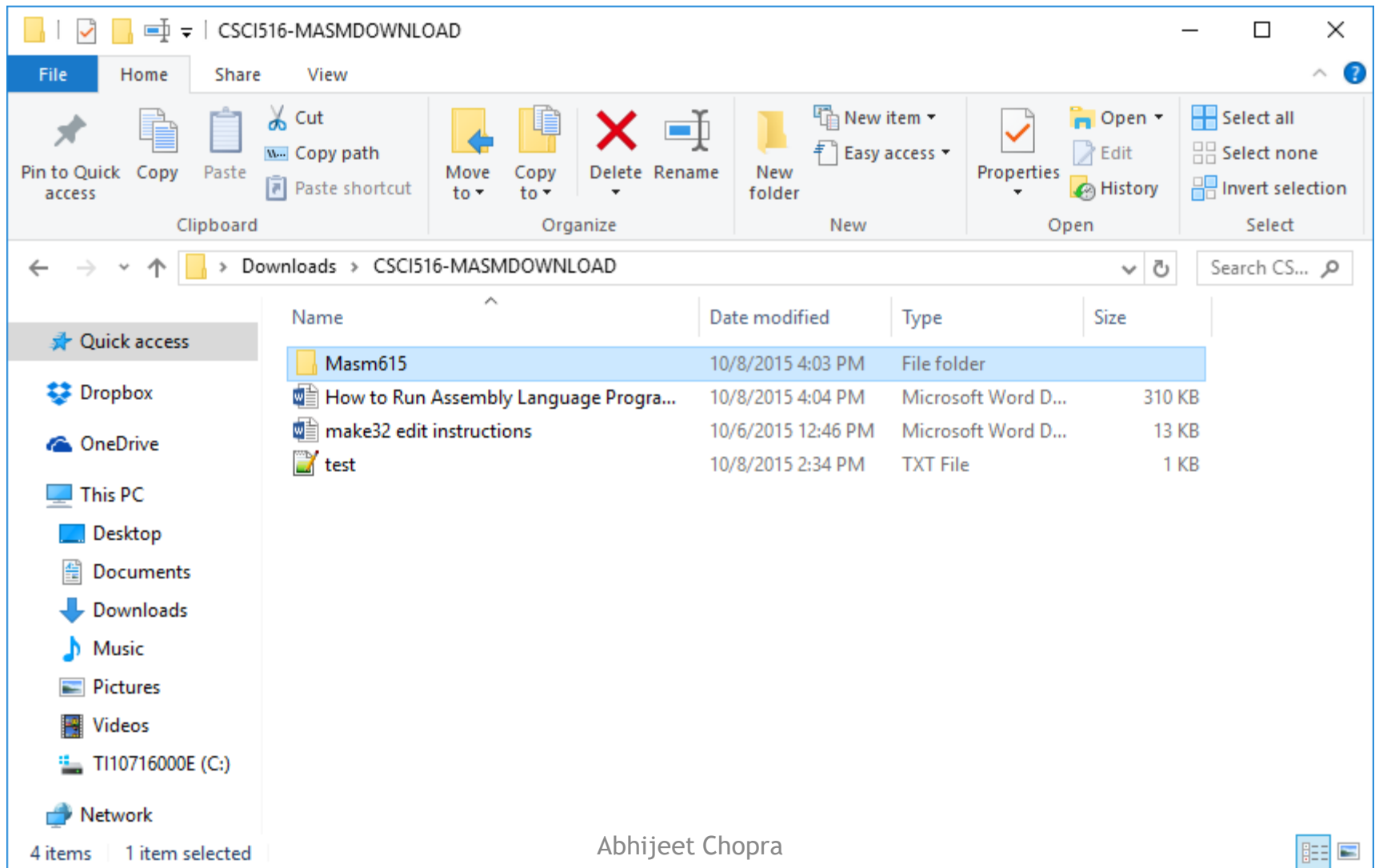
Download the zip file named “CSCI516-MASMDOWNLOAD.zip” file from your course Dropbox in eCollege.



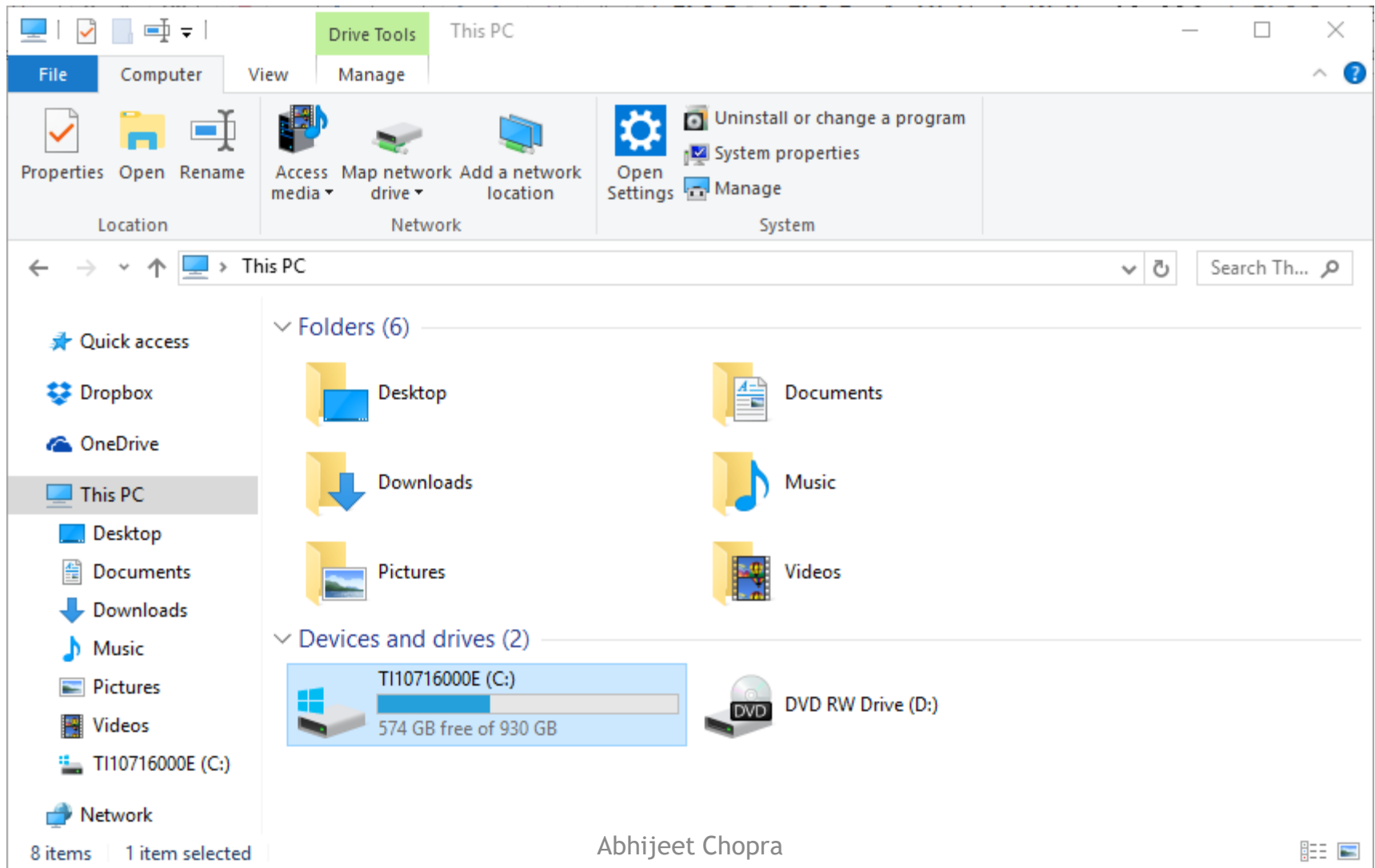
Extract the contents of the zip file.



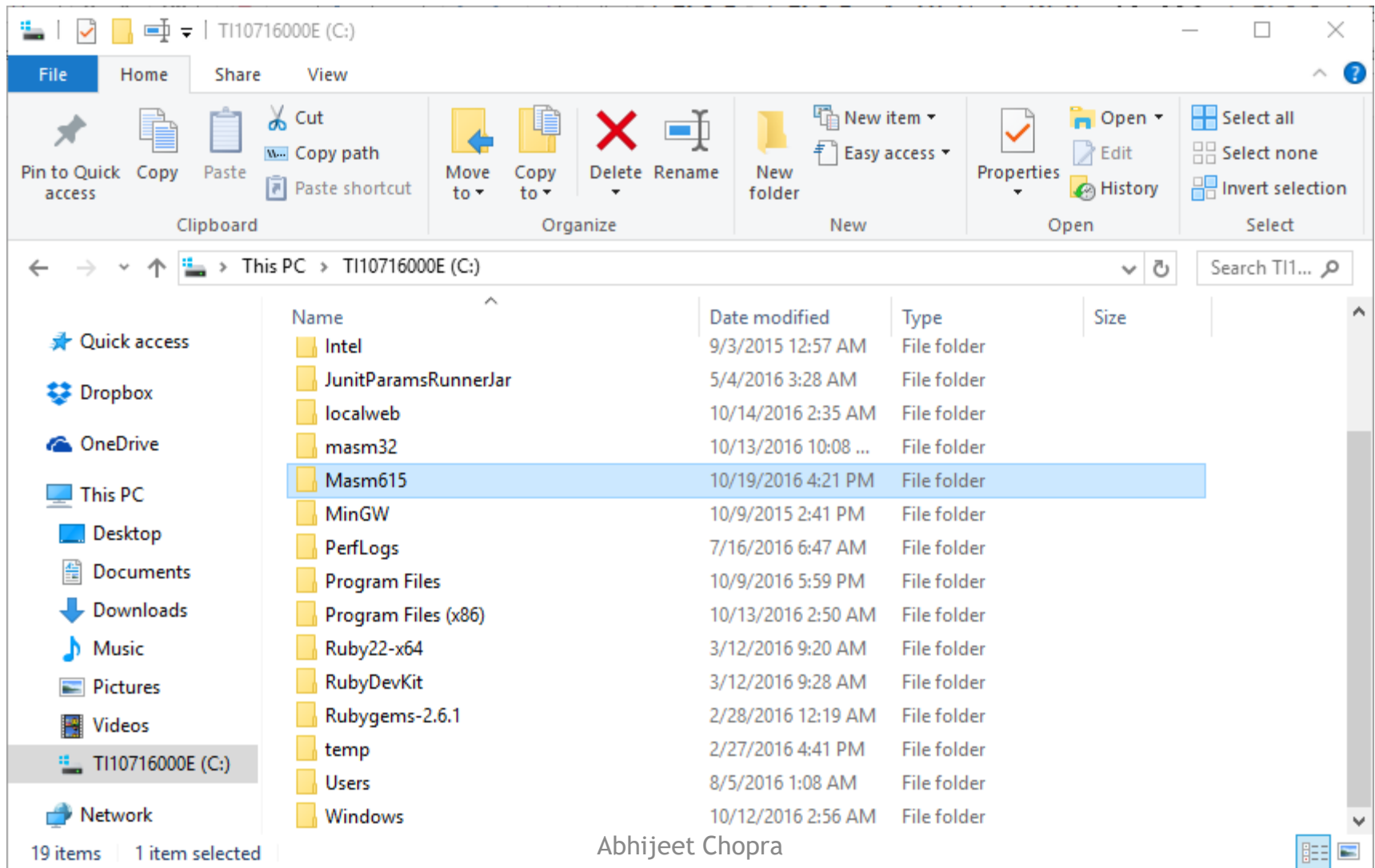
Copy/Cut the folder named “Masm615”.



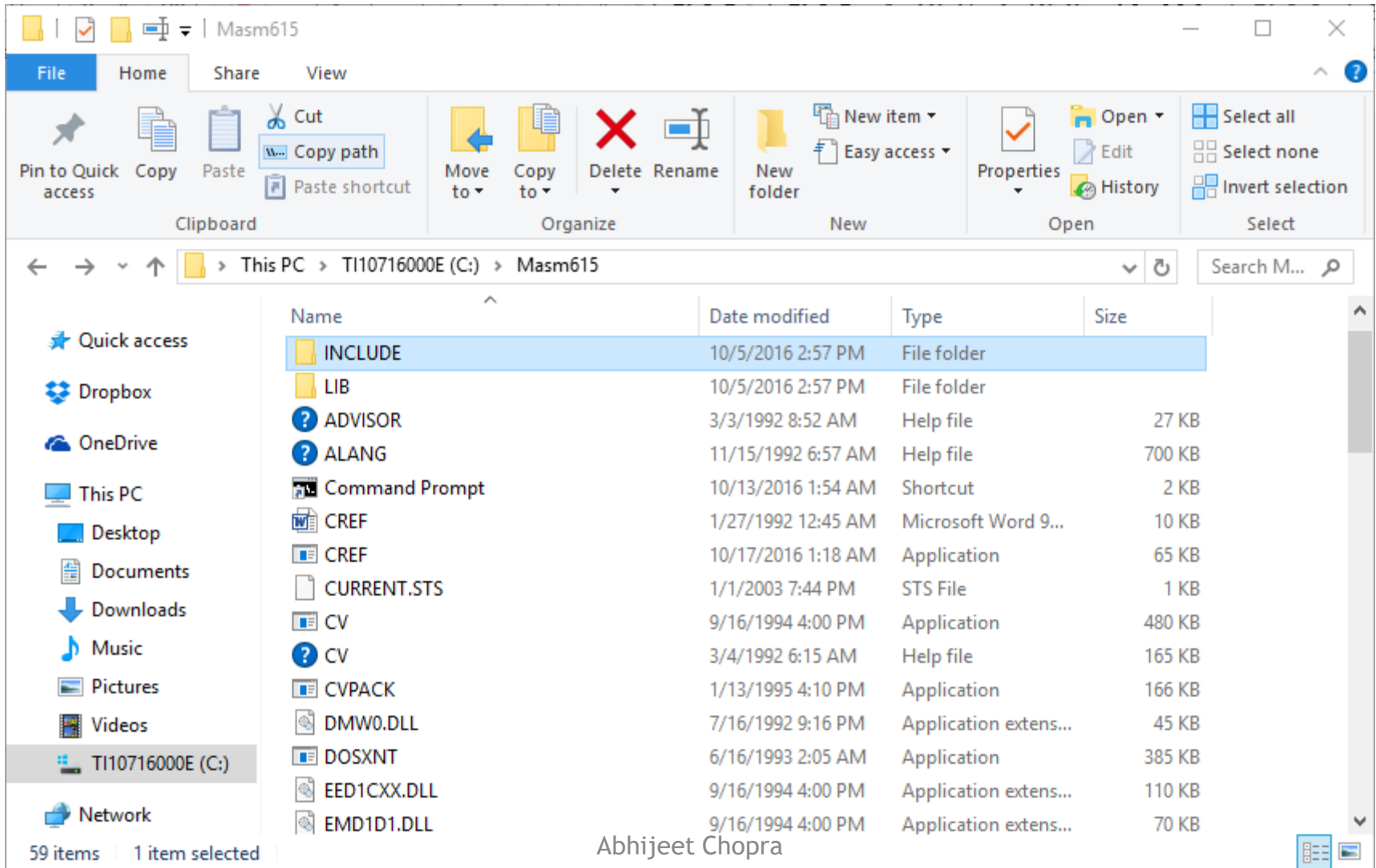
Open the C: Drive in your computer.



Paste the previously copied folder “Masm616” in the C: Drive.



Open this folder named “Masm615”. All Assembly code (.asm) files should be placed in this directory/folder in order to be compiled and executed.



Copy the following code.

```
INCLUDE Irvine32.inc

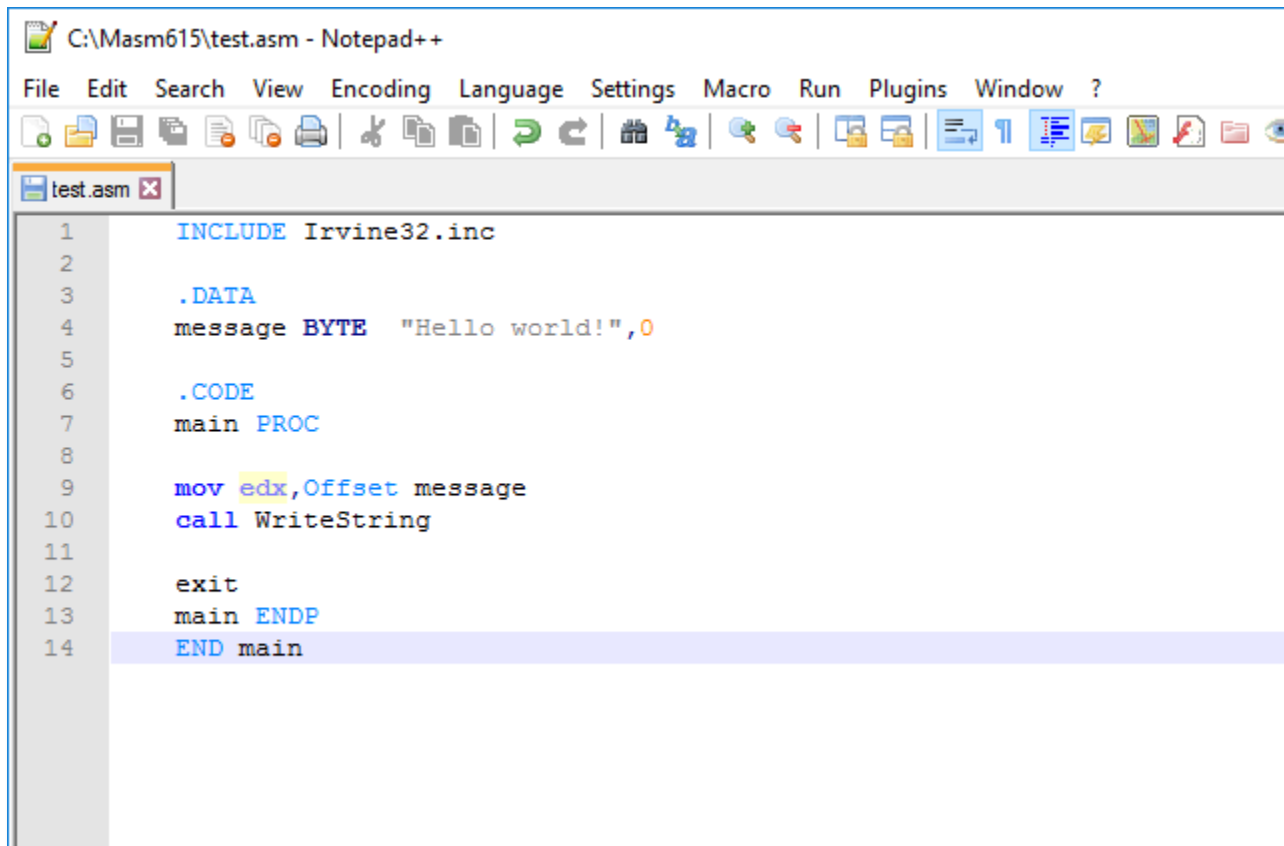
.DATA
message BYTE  "Hello world!",0

.CODE
main PROC

mov edx,Offset message
call WriteString

exit
main ENDP
END main
```

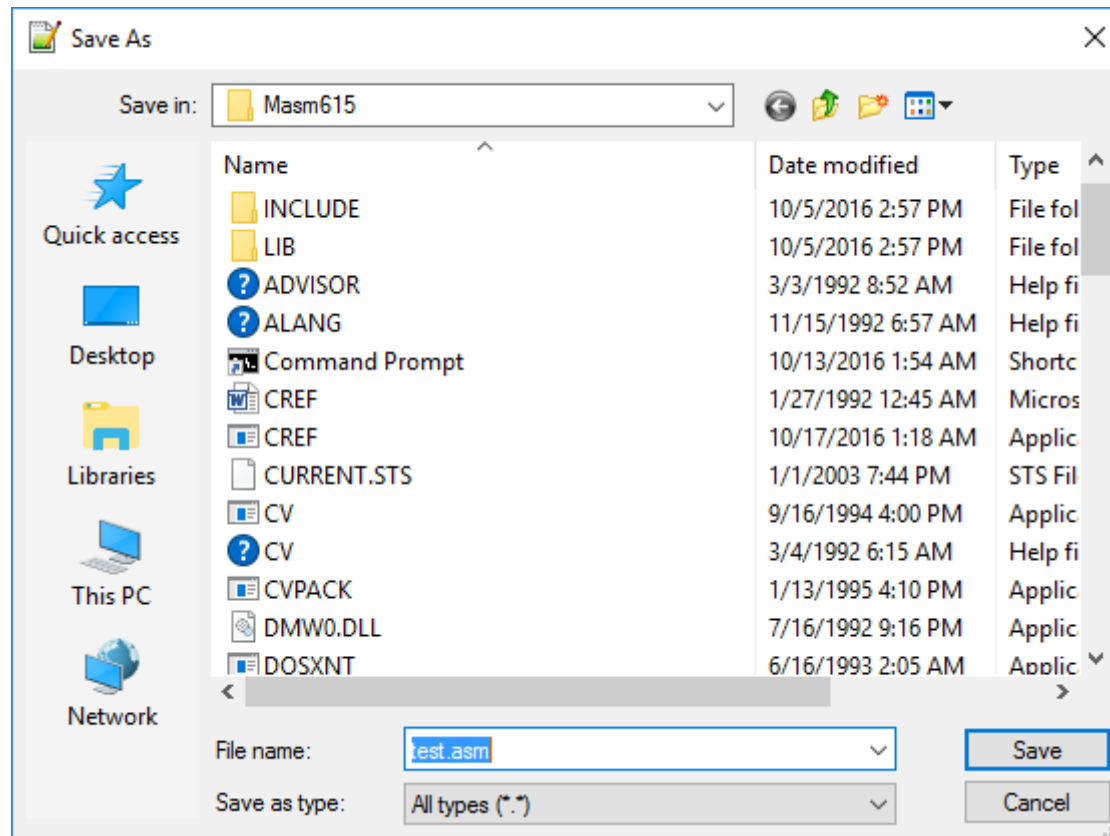

Create a new file in any text editor and paste the code.



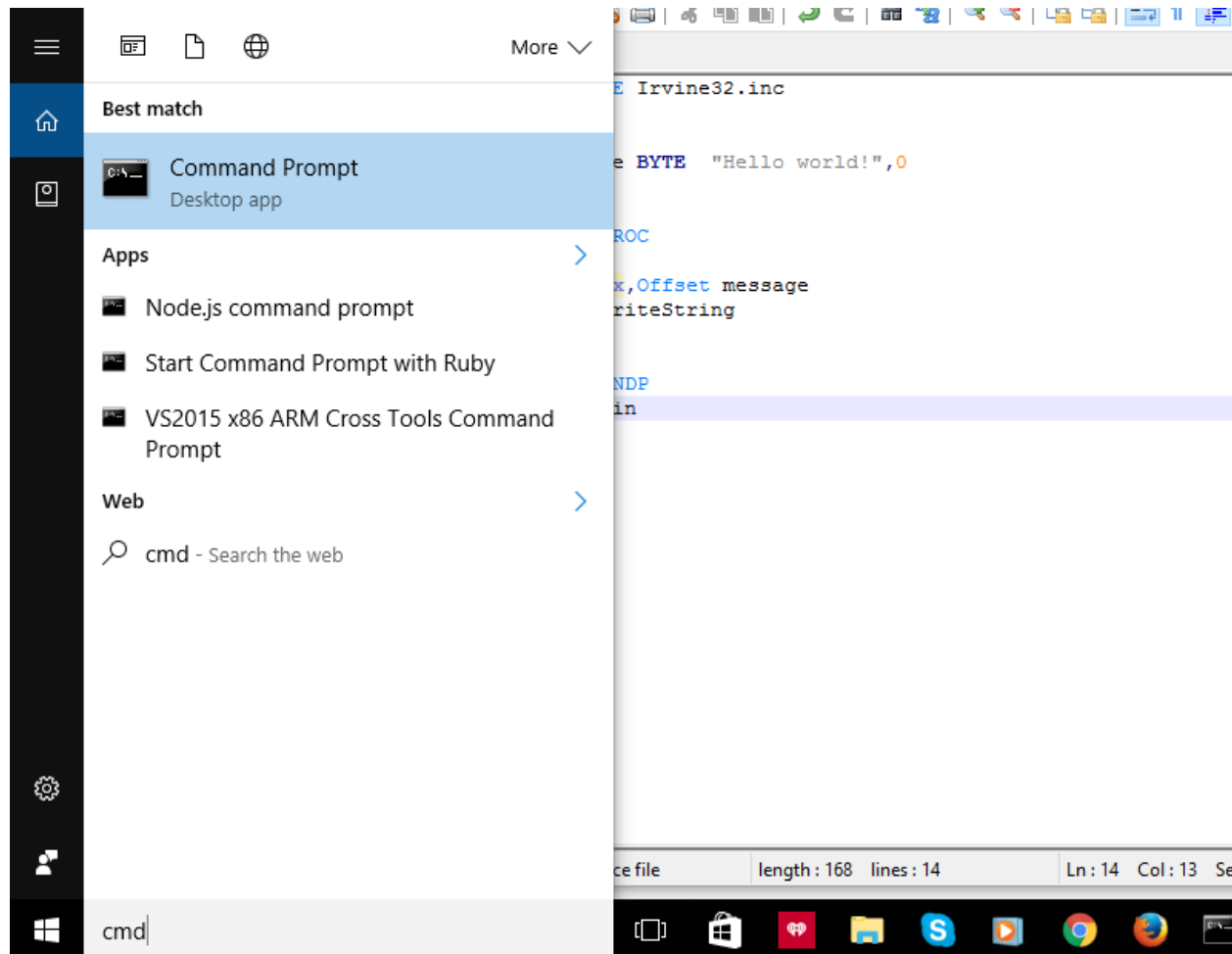
The screenshot shows a Notepad++ window titled 'C:\Masm615\test.asm - Notepad++'. The menu bar includes File, Edit, Search, View, Encoding, Language, Settings, Macro, Run, Plugins, Window, and ?. The toolbar contains various icons for file operations, editing, and development. The active tab is 'test.asm'. The code is as follows:

```
1  INCLUDE Irvine32.inc
2
3  .DATA
4  message BYTE "Hello world!",0
5
6  .CODE
7  main PROC
8
9  mov edx,Offset message
10 call WriteString
11
12 exit
13 main ENDP
14 END main
```

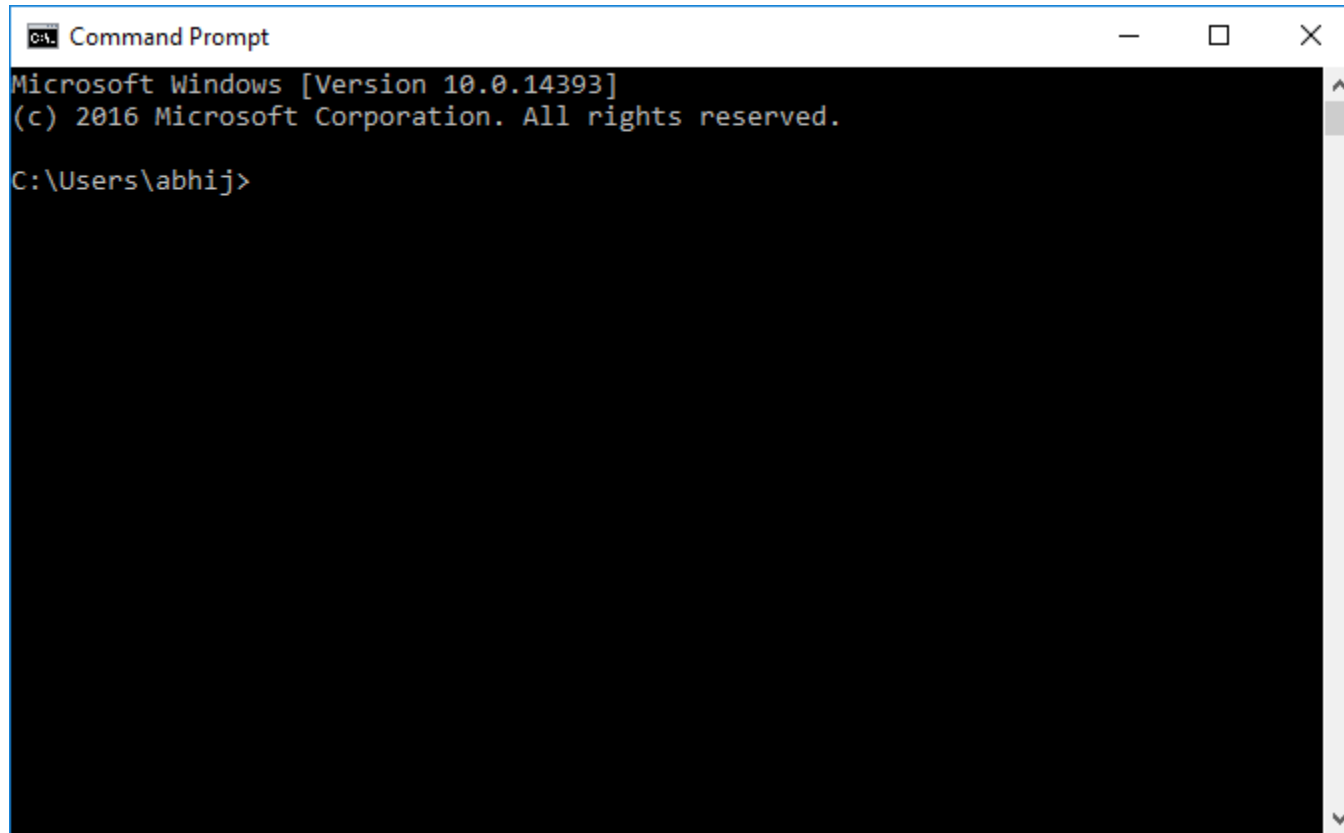
Save the file with the name and extension “test.asm” in the folder “Masm615”.



Click on the windows/start button and type “cmd” in the search bar. Click on the “Command Prompt” app to open it.



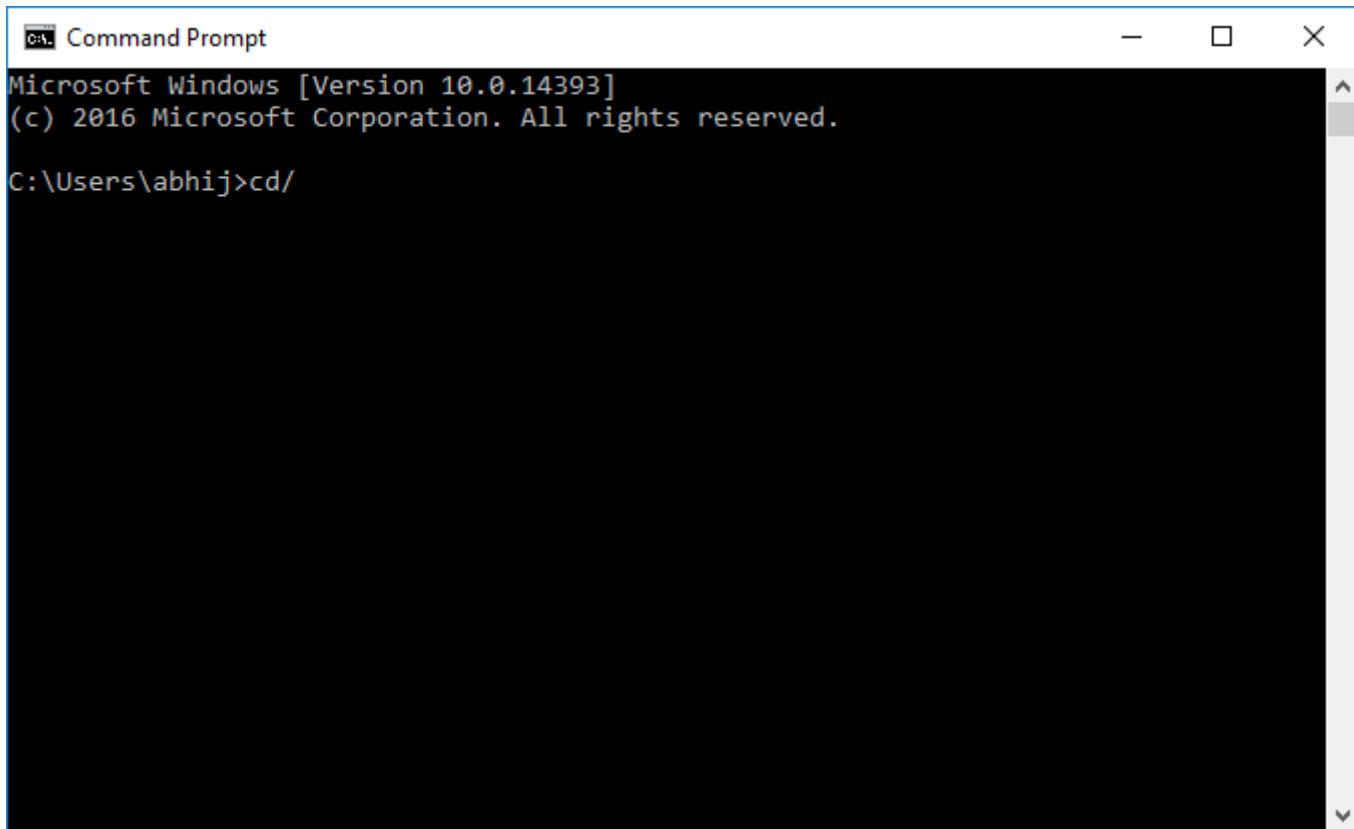
Command Prompt window is open as shown below.

A screenshot of a Windows Command Prompt window. The title bar at the top reads "Command Prompt" with standard minimize, maximize, and close buttons. The window has a black background with white text. The text displayed is: "Microsoft Windows [Version 10.0.14393]" on the first line, "(c) 2016 Microsoft Corporation. All rights reserved." on the second line, and "C:\Users\abhi>" on the third line, indicating the current directory and the command prompt character. A vertical scrollbar is visible on the right side of the window.

```
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.

C:\Users\abhi>
```

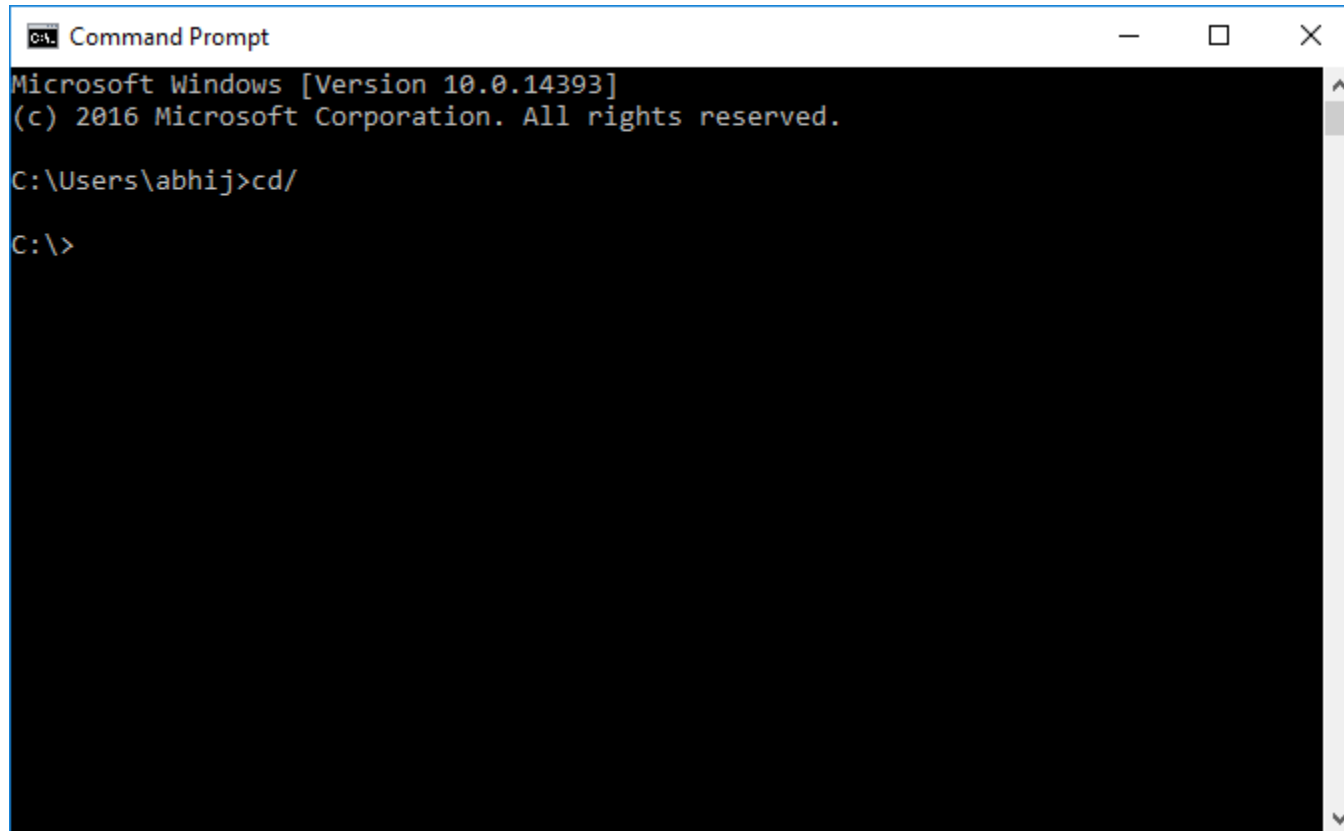
Type “cd/” and press enter.



```
C:\> Command Prompt
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.

C:\Users\abhij>cd/
```

The current directory changes to C:\

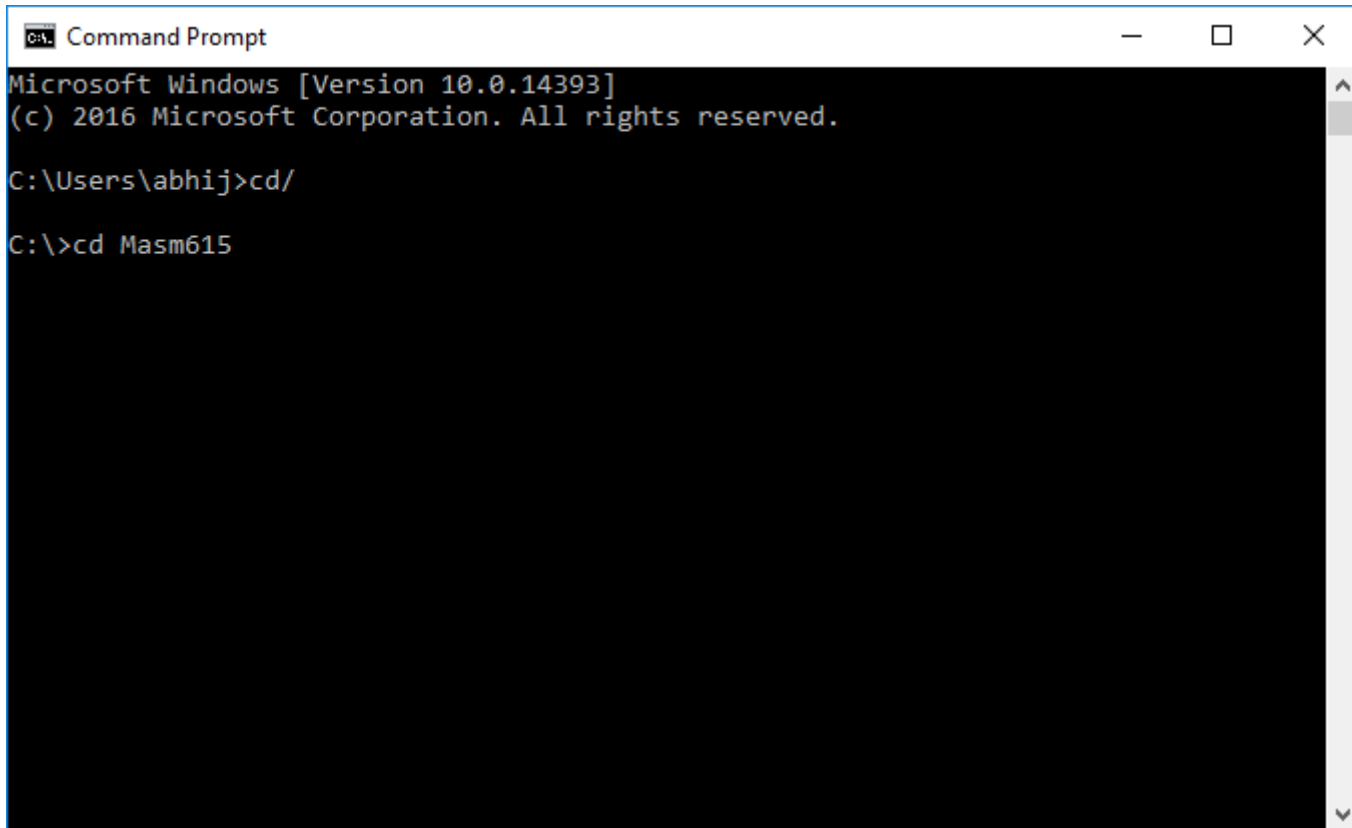
A screenshot of a Windows Command Prompt window. The title bar at the top reads "C:\ Command Prompt" and includes standard window controls (minimize, maximize, close). The main area is black with white text. It displays the Microsoft Windows version (10.0.14393) and copyright information (© 2016 Microsoft Corporation). The prompt shows the user is in the directory C:\Users\abhij and has entered the command "cd/" to change to the root of the C: drive. The prompt now shows "C:\>".

```
C:\ Command Prompt
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.

C:\Users\abhij>cd/

C:\>
```

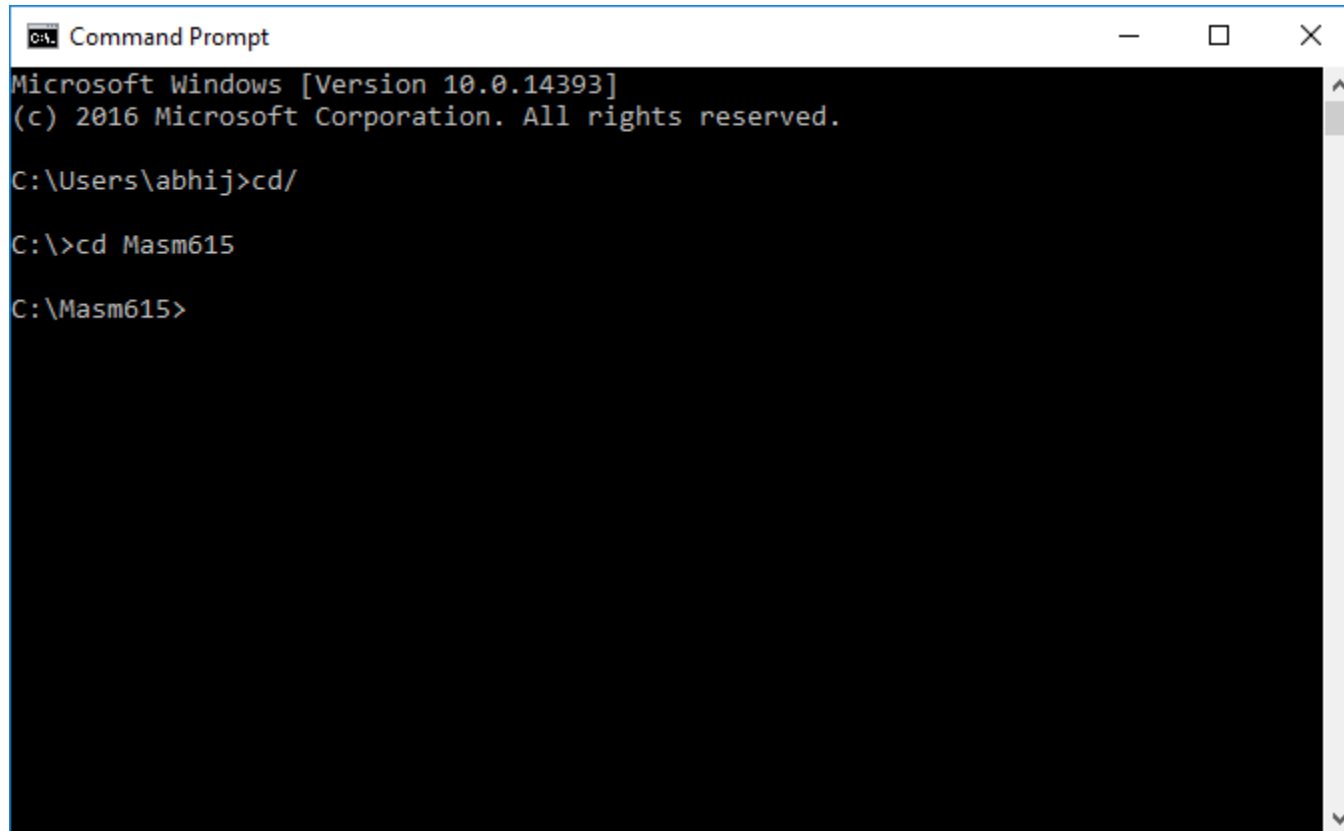
Type “cd Masm615” and press enter.

A screenshot of a Windows Command Prompt window. The title bar at the top reads "C:\> Command Prompt" and includes standard window controls (minimize, maximize, close). The main area has a black background with white text. It displays the Windows version information: "Microsoft Windows [Version 10.0.14393]" and the copyright notice: "(c) 2016 Microsoft Corporation. All rights reserved." Below this, the current directory is shown as "C:\Users\abhij>". The user has entered the command "cd /", and the prompt has moved to "C:\>". The user then enters "cd Masm615", and the prompt moves to "C:\>cd Masm615". A vertical scrollbar is visible on the right side of the command area.

```
C:\> Command Prompt
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.

C:\Users\abhij>cd /
C:\>cd Masm615
```

The current directory changes to C:\Masm615.

A screenshot of a Windows Command Prompt window. The title bar reads "Command Prompt". The window content shows the following text: "Microsoft Windows [Version 10.0.14393]" followed by "(c) 2016 Microsoft Corporation. All rights reserved." on the next line. The prompt "C:\Users\abhij>" is followed by the command "cd/" on the next line. The next line shows the prompt "C:\>" followed by the command "cd Masm615". The final line shows the prompt "C:\Masm615>". The window has a standard Windows interface with a title bar, maximize button, and scrollbar on the right.

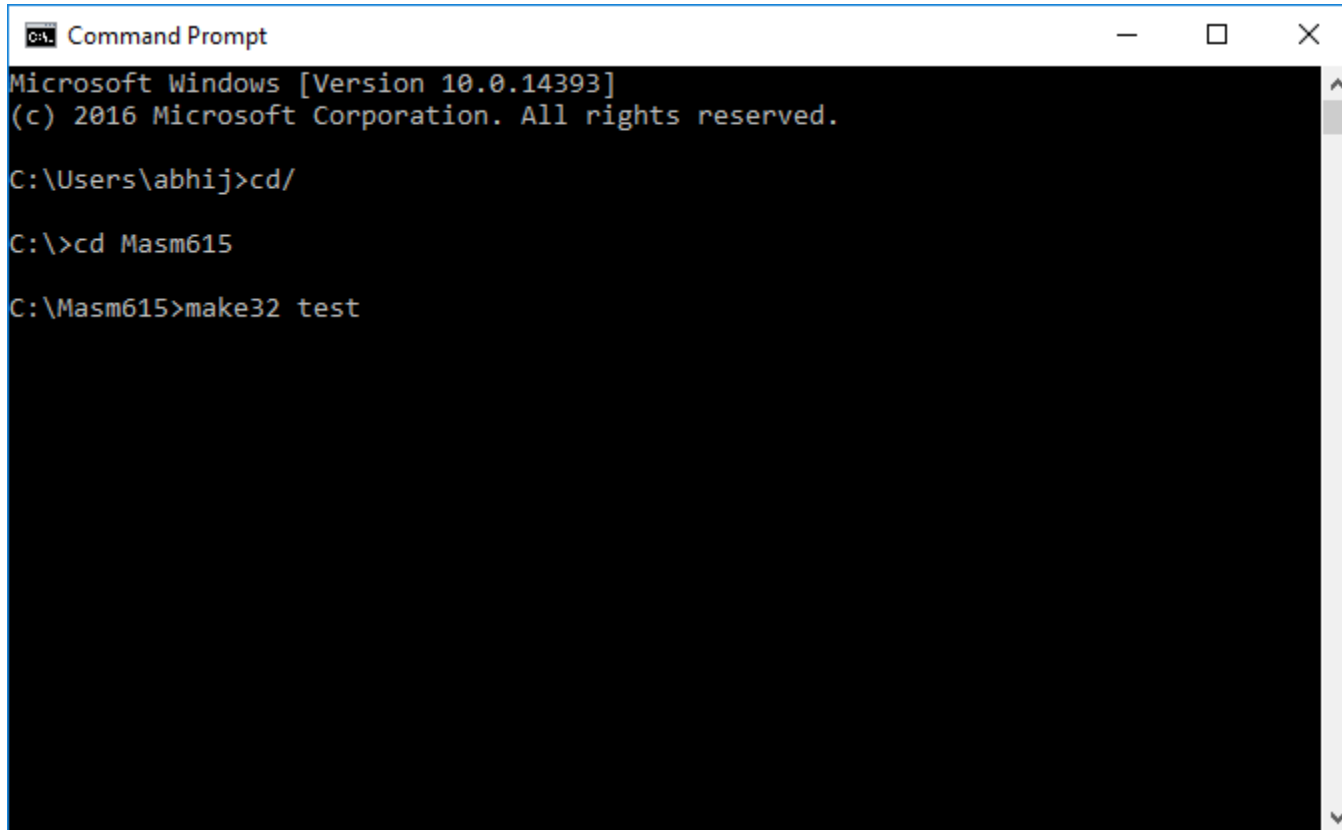
```
Command Prompt
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.

C:\Users\abhij>cd/

C:\>cd Masm615

C:\Masm615>
```


Type “make32 test” and press enter.

A screenshot of a Windows Command Prompt window. The title bar reads "Command Prompt". The window content shows the following text: "Microsoft Windows [Version 10.0.14393]", "(c) 2016 Microsoft Corporation. All rights reserved.", "C:\Users\abhij>cd/", "C:\>cd Masm615", and "C:\Masm615>make32 test". The prompt "C:\Masm615>" is followed by the command "make32 test".

```
Command Prompt
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.

C:\Users\abhij>cd/

C:\>cd Masm615

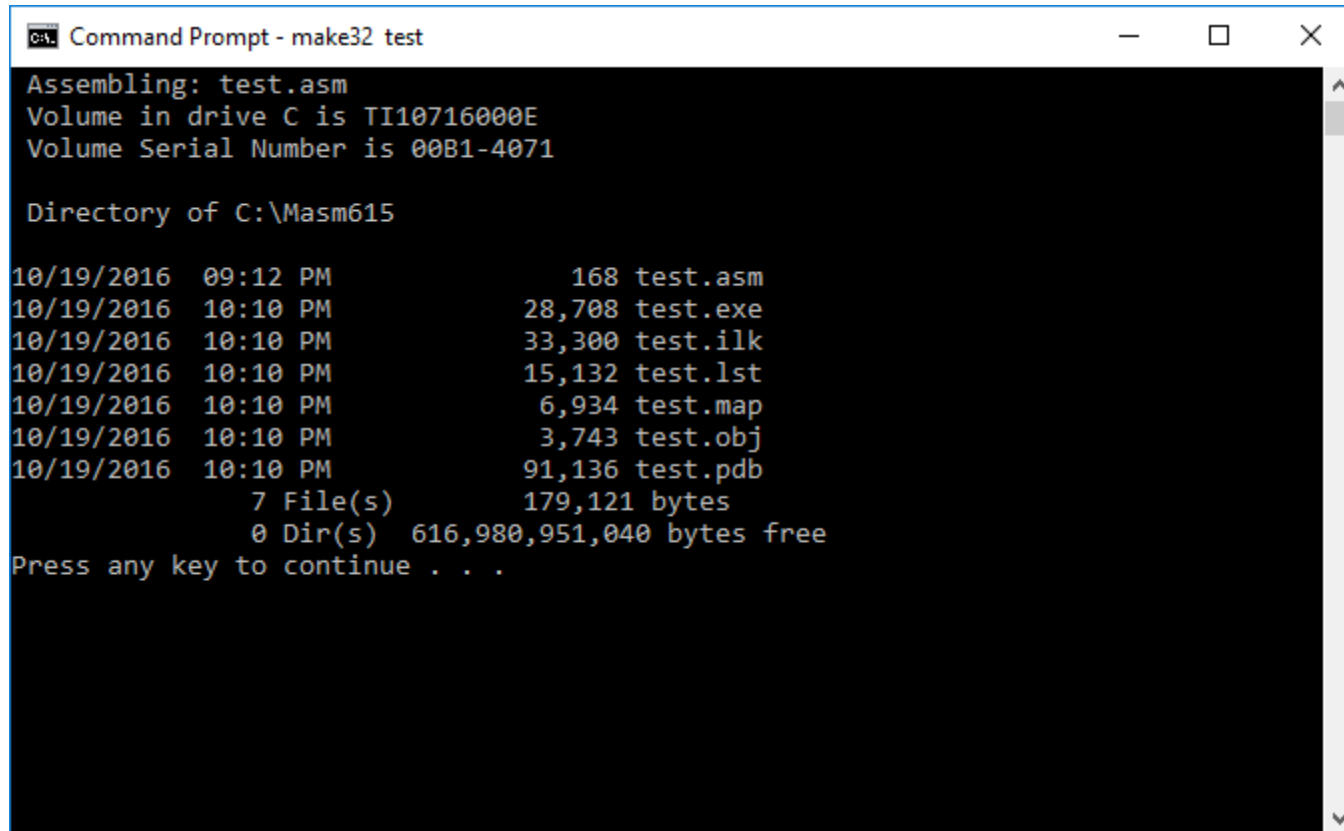
C:\Masm615>make32 test
```

NOTE: Command to compile assembly code file (.asm) is

C:\Masm615>make32 *<filename_without_extension>*

Abhijeet Chopra

If compiled successfully, the following output is displayed. An executable file (.exe) is created. Press any key.



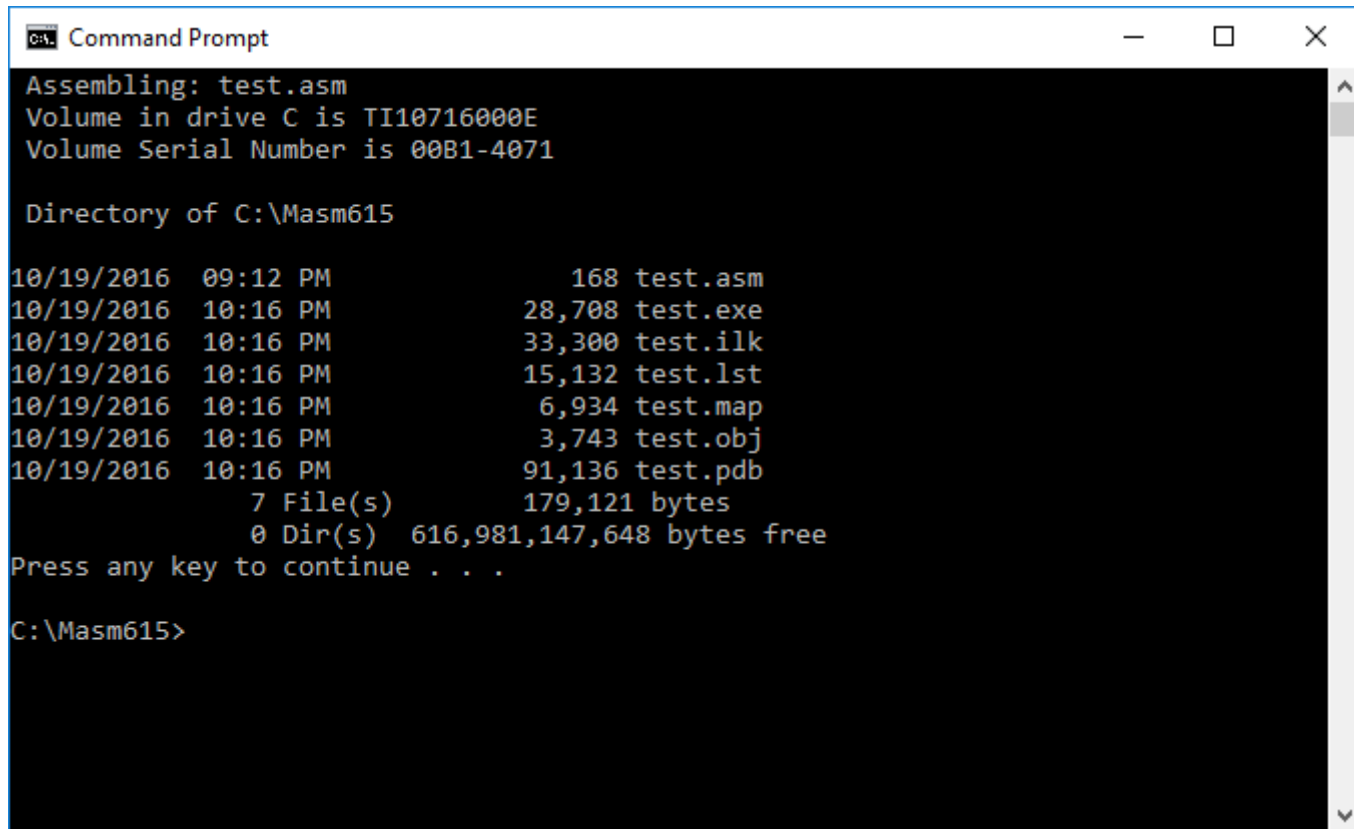
```
Command Prompt - make32 test

Assembling: test.asm
Volume in drive C is TI10716000E
Volume Serial Number is 00B1-4071

Directory of C:\Masm615

10/19/2016  09:12 PM                168 test.asm
10/19/2016  10:10 PM            28,708 test.exe
10/19/2016  10:10 PM            33,300 test.ilc
10/19/2016  10:10 PM            15,132 test.lst
10/19/2016  10:10 PM             6,934 test.map
10/19/2016  10:10 PM             3,743 test.obj
10/19/2016  10:10 PM            91,136 test.pdb
              7 File(s)            179,121 bytes
              0 Dir(s)  616,980,951,040 bytes free
Press any key to continue . . .
```

After pressing a key control returns to the Command Prompt.



```
C:\> Command Prompt

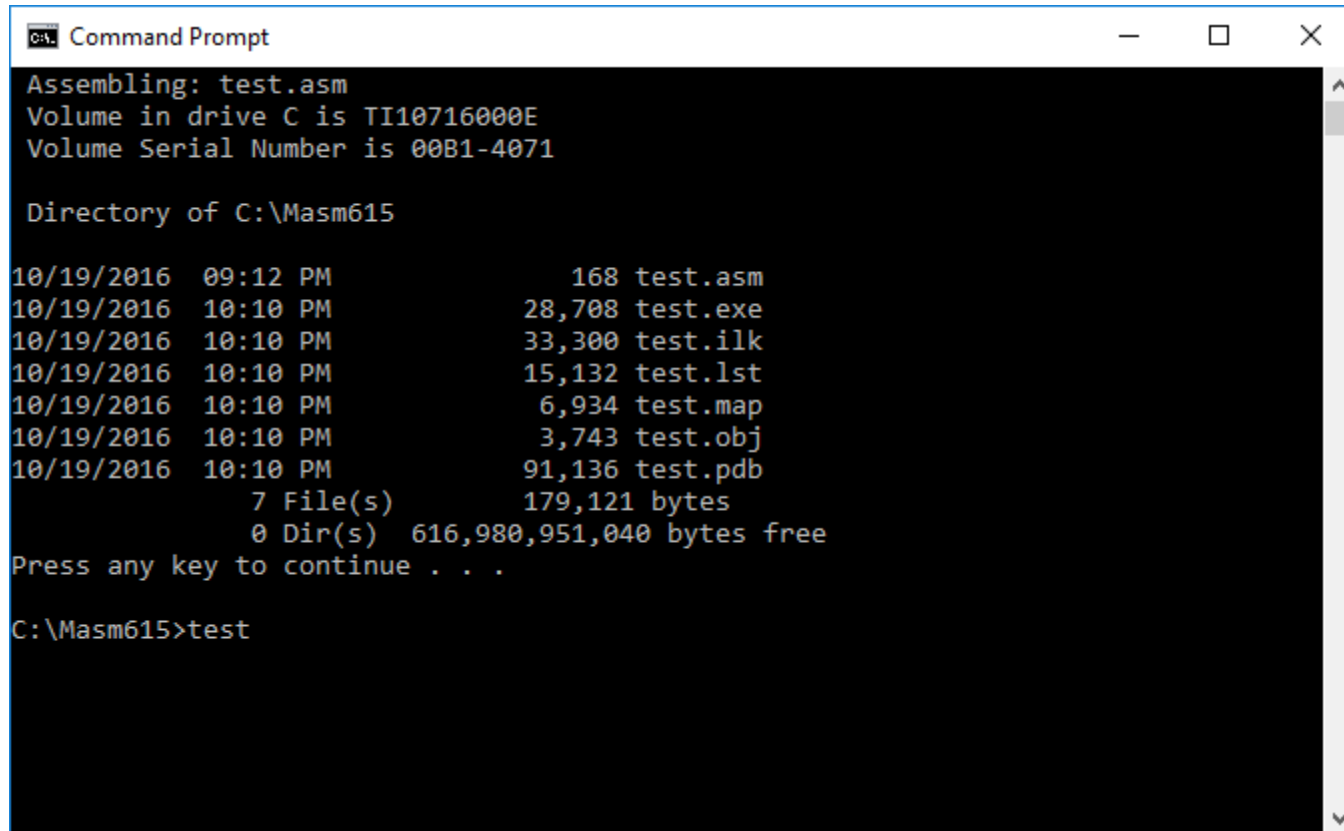
Assembling: test.asm
Volume in drive C is TI10716000E
Volume Serial Number is 00B1-4071

Directory of C:\Masm615

10/19/2016  09:12 PM                168 test.asm
10/19/2016  10:16 PM            28,708 test.exe
10/19/2016  10:16 PM            33,300 test.ilc
10/19/2016  10:16 PM            15,132 test.lst
10/19/2016  10:16 PM             6,934 test.map
10/19/2016  10:16 PM             3,743 test.obj
10/19/2016  10:16 PM            91,136 test.pdb
              7 File(s)          179,121 bytes
              0 Dir(s)  616,981,147,648 bytes free
Press any key to continue . . .

C:\Masm615>
```

Type “test” (the file name without extension) to execute the program.



```
Ca\ Command Prompt
Assembling: test.asm
Volume in drive C is TI10716000E
Volume Serial Number is 00B1-4071

Directory of C:\Masm615

10/19/2016  09:12 PM                168 test.asm
10/19/2016  10:10 PM            28,708 test.exe
10/19/2016  10:10 PM            33,300 test.ilc
10/19/2016  10:10 PM            15,132 test.lst
10/19/2016  10:10 PM             6,934 test.map
10/19/2016  10:10 PM             3,743 test.obj
10/19/2016  10:10 PM            91,136 test.pdb
              7 File(s)            179,121 bytes
              0 Dir(s)  616,980,951,040 bytes free
Press any key to continue . . .

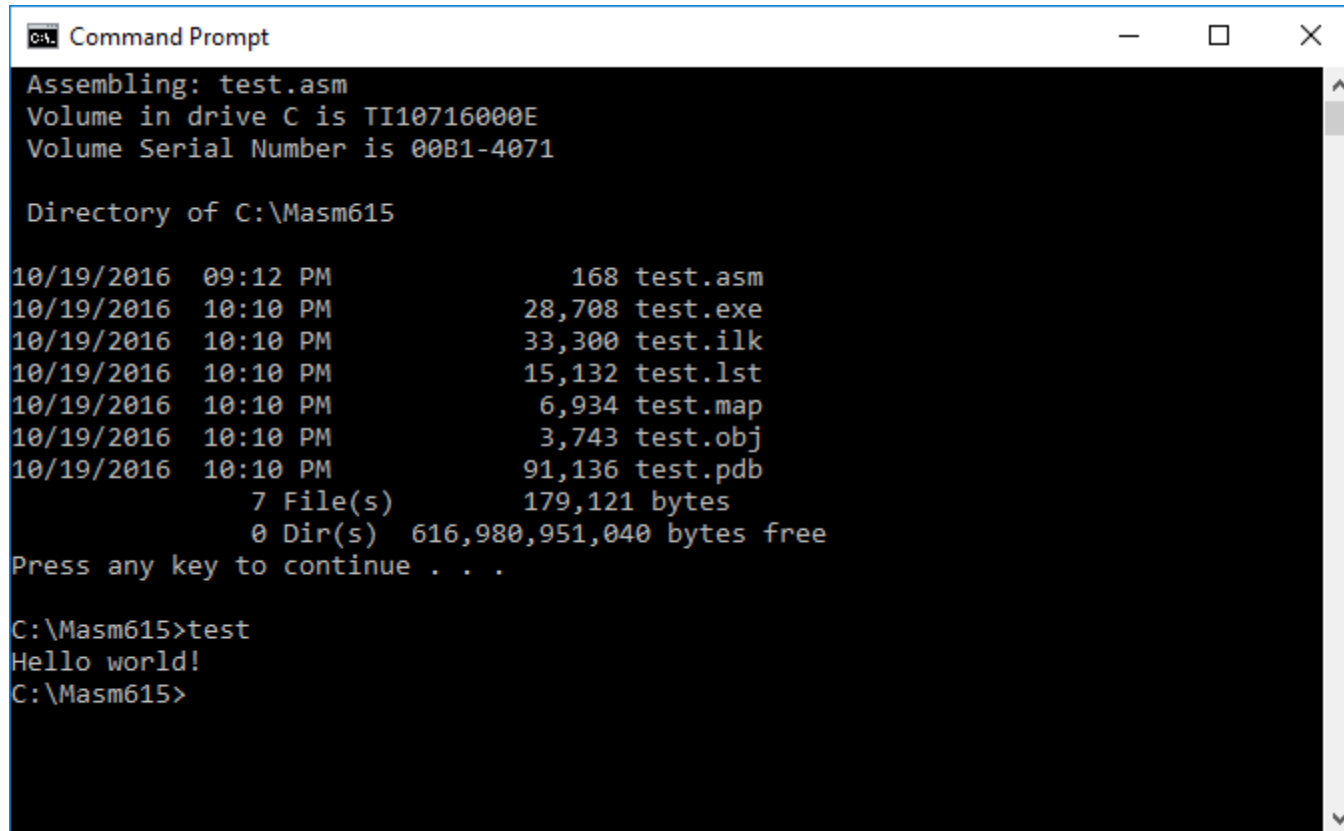
C:\Masm615>test
```

NOTE: Command to run the executable file (.ext) is

C:\Masm615><filename_without_extension>

Abhijeet Chopra

The file executes and the output (in this case “Hello world!”) is displayed.



```
CA: Command Prompt
Assembling: test.asm
Volume in drive C is TI10716000E
Volume Serial Number is 00B1-4071

Directory of C:\Masm615

10/19/2016  09:12 PM                168 test.asm
10/19/2016  10:10 PM            28,708 test.exe
10/19/2016  10:10 PM            33,300 test.ilc
10/19/2016  10:10 PM            15,132 test.lst
10/19/2016  10:10 PM             6,934 test.map
10/19/2016  10:10 PM             3,743 test.obj
10/19/2016  10:10 PM            91,136 test.pdb
              7 File(s)          179,121 bytes
              0 Dir(s)  616,980,951,040 bytes free
Press any key to continue . . .

C:\Masm615>test
Hello world!
C:\Masm615>
```