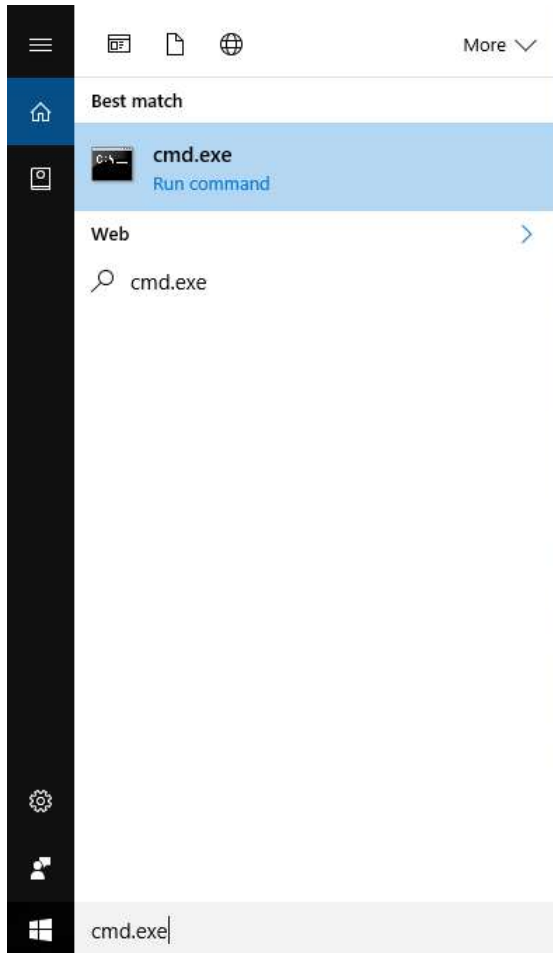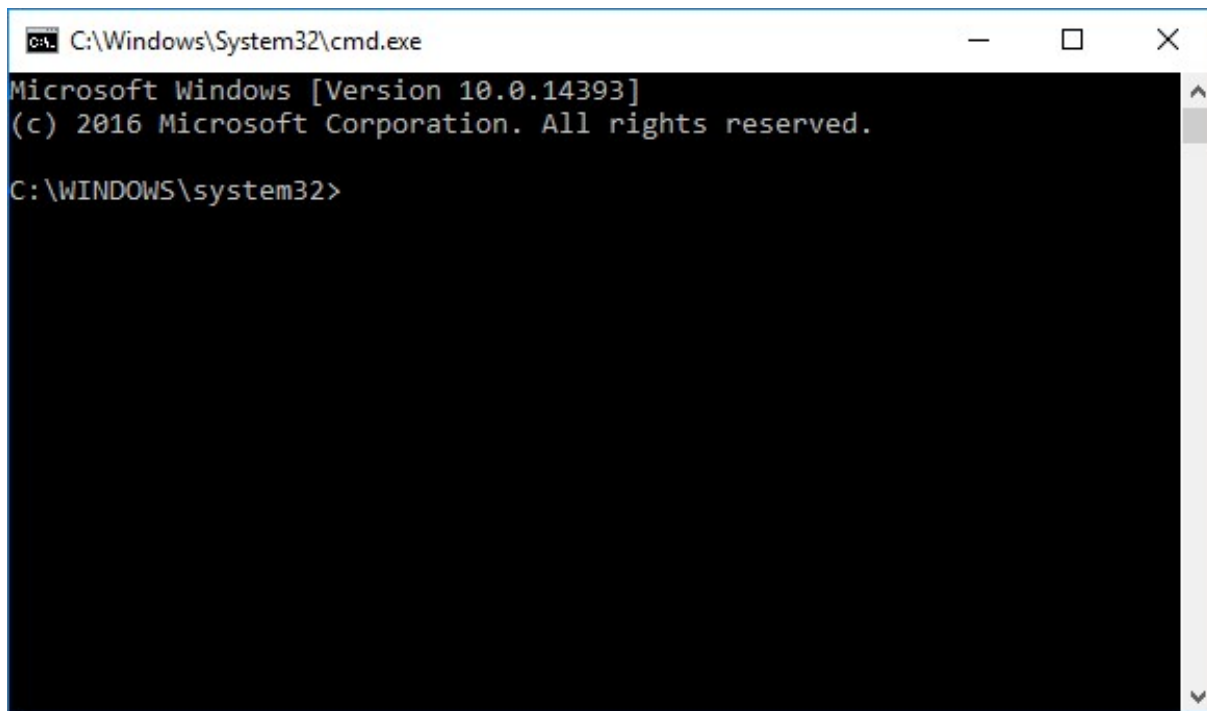# Command Prompt (cmd.exe)

The easiest way to find command prompt is to search in the Start menu for "cmd.exe".
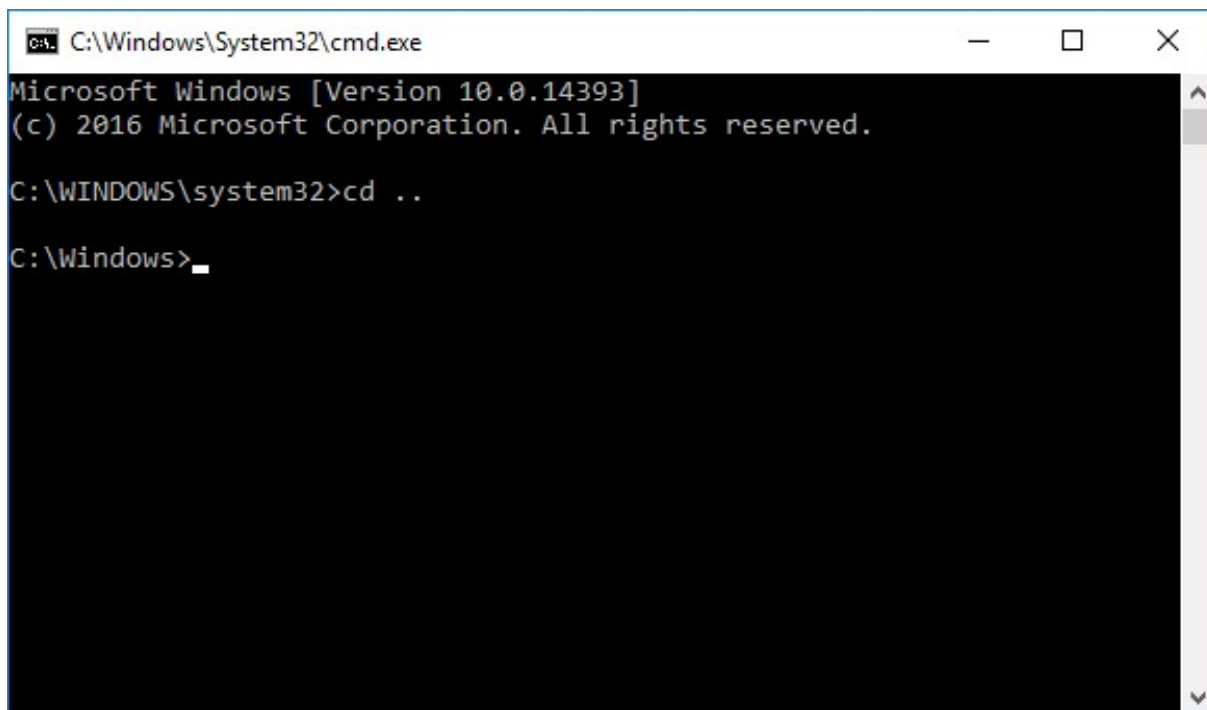

This opens up a command window as shown on next page.

Moving Up a Directory (cd ..) The command prompt has opened in the directory
"C:\WINDOWS\system32" as indicated by the prompt. In order to move up a directory level to
"C:\WINDOWS", enter "cd ..". Here "cd" is meant to stand for "change directory" and ".." is
a special name given to the directory above the current one.
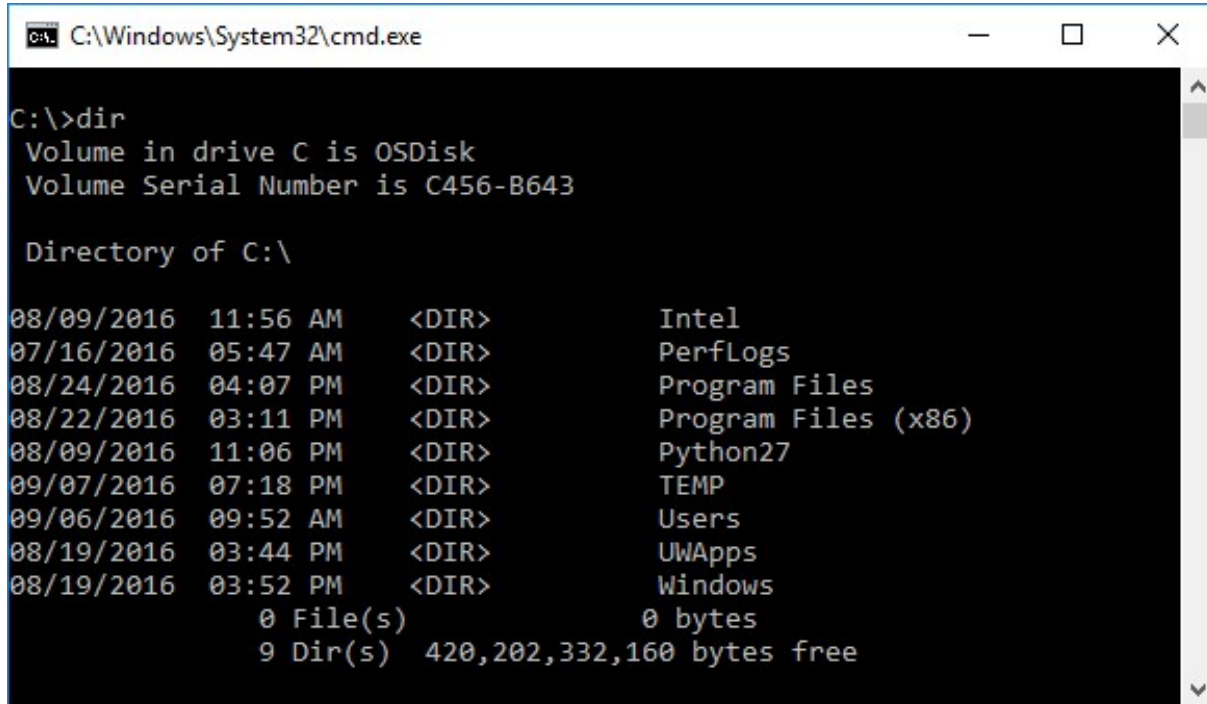
Note that the path now reads "C:\Windows" instead of "C:\WINDOWS" as expected. Windows
file systems are not case sensitive, so these names are equivalent.

Entering "cd .." again will take me to the directory "C:\".

Listing Contents (dir)

To list the contents of a directory, including subdirectories, enter "dir" (for 'directory').

```
C:\Windows\System32\cmd.exe                                    —    □    ×

C:\>dir
 Volume in drive C is OSDisk
 Volume Serial Number is C456-B643

 Directory of C:\

08/09/2016  11:56 AM    <DIR>          Intel
07/16/2016  05:47 AM    <DIR>          PerfLogs
08/24/2016  04:07 PM    <DIR>          Program Files
08/22/2016  03:11 PM    <DIR>          Program Files (x86)
08/09/2016  11:06 PM    <DIR>          Python27
09/07/2016  07:18 PM    <DIR>          TEMP
09/06/2016  09:52 AM    <DIR>          Users
08/19/2016  03:44 PM    <DIR>          UWApps
08/19/2016  03:52 PM    <DIR>          Windows
               0 File(s)              0 bytes
               9 Dir(s)  420,202,332,160 bytes free
```

Changing to a Subdirectory (cd {name})

In order to move to a subdirectory, type "cd {name}" where {name} would be replaced by the name of the subdirectory (relative to the current one). In this case, I've changed to "C:\TEMP" by typing "cd TEMP". Since windows file systems are not case sensitive, "cd temp" would have worked just as well.

Entering "cd ConsoleApplication1\Debug" will take me two levels down,
to "C:\TEMP\ConsoleApplication1\Debug", where the executable for my program resides.

Executing a Program by name

A program can be executing simply by typing its name – in this case "ConsoleApplication1.exe".

```
C:\Windows\System32\cmd.exe                                          —    □    ×

C:\TEMP\ConsoleApplication1\Debug>dir
 Volume in drive C is OSDisk
 Volume Serial Number is C456-B643

 Directory of C:\TEMP\ConsoleApplication1\Debug

09/07/2016  07:03 PM    <DIR>          .
09/07/2016  07:03 PM    <DIR>          ..
09/07/2016  08:04 PM            45,568 ConsoleApplication1.exe
09/07/2016  08:04 PM           348,832 ConsoleApplication1.ilk
09/07/2016  08:04 PM           864,256 ConsoleApplication1.pdb
               3 File(s)      1,258,656 bytes
               2 Dir(s)  420,200,681,472 bytes free

C:\TEMP\ConsoleApplication1\Debug>ConsoleApplication1.exe_
```

This program is similar to the one you wrote for Lab 2, so it has asked the user for input and responded accordingly.
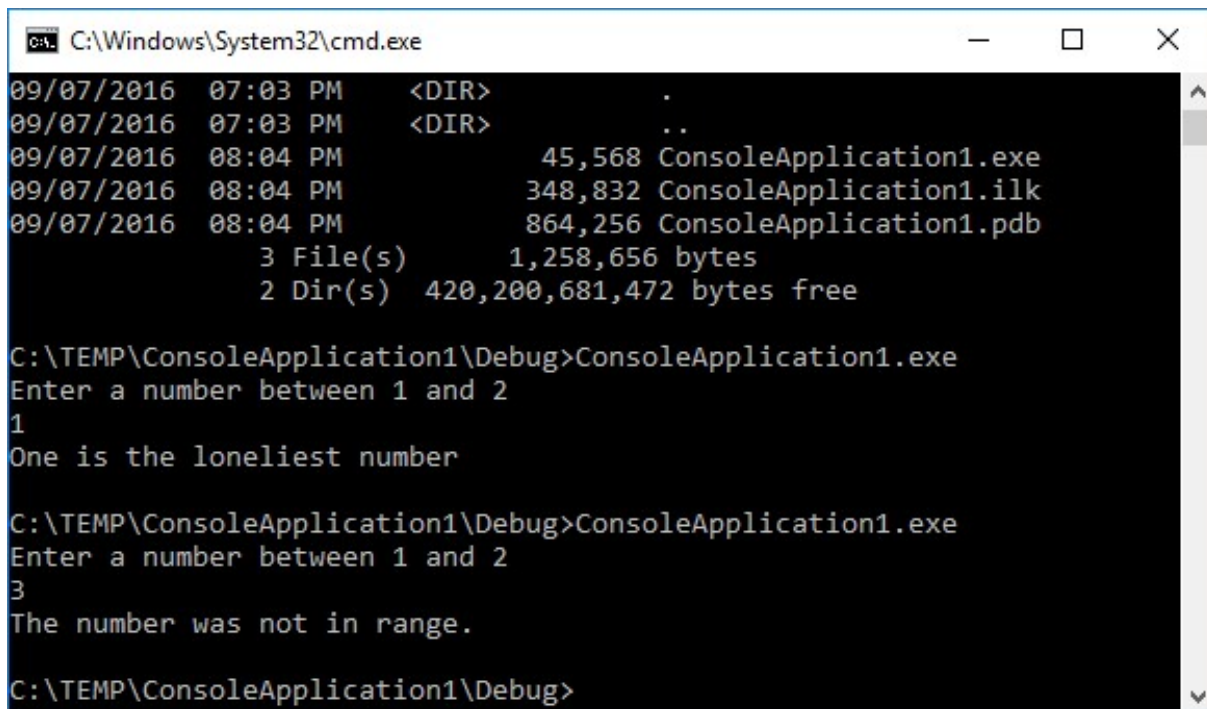
```
C:\Windows\System32\cmd.exe                                          —    □    ×

C:\TEMP\ConsoleApplication1\Debug>dir
 Volume in drive C is OSDisk
 Volume Serial Number is C456-B643

 Directory of C:\TEMP\ConsoleApplication1\Debug

09/07/2016  07:03 PM    <DIR>          .
09/07/2016  07:03 PM    <DIR>          ..
09/07/2016  08:04 PM            45,568 ConsoleApplication1.exe
09/07/2016  08:04 PM           348,832 ConsoleApplication1.ilk
09/07/2016  08:04 PM           864,256 ConsoleApplication1.pdb
               3 File(s)      1,258,656 bytes
               2 Dir(s)  420,200,681,472 bytes free

C:\TEMP\ConsoleApplication1\Debug>ConsoleApplication1.exe
Enter a number between 1 and 2
1
One is the loneliest number
```

Note that, unlike when a program is called directly from Visual Studio, a prompt is displayed instead of "Press any key to exit...". This allows us to call the program multiple times to observe different behaviors in the same window. This is shown below.

```
C:\Windows\System32\cmd.exe                                    —    □    ✕

09/07/2016  07:03 PM    <DIR>          .
09/07/2016  07:03 PM    <DIR>          ..
09/07/2016  08:04 PM            45,568 ConsoleApplication1.exe
09/07/2016  08:04 PM           348,832 ConsoleApplication1.ilk
09/07/2016  08:04 PM           864,256 ConsoleApplication1.pdb
               3 File(s)      1,258,656 bytes
               2 Dir(s)  420,200,681,472 bytes free

C:\TEMP\ConsoleApplication1\Debug>ConsoleApplication1.exe
Enter a number between 1 and 2
1
One is the loneliest number

C:\TEMP\ConsoleApplication1\Debug>ConsoleApplication1.exe
Enter a number between 1 and 2
3
The number was not in range.

C:\TEMP\ConsoleApplication1\Debug>
```

Copying Text

Text is selecting simply by dragging across the window with the mouse and selecting a rectangular area. It can then be copied either by pressing enter or a right-click with the mouse. Once copied to the clipboard, it can be pasted into a text editor.

```
Select C:\Windows\System32\cmd.exe                             —    □    ✕

09/07/2016  07:03 PM    <DIR>          .
09/07/2016  07:03 PM    <DIR>          ..
09/07/2016  08:04 PM            45,568 ConsoleApplication1.exe
09/07/2016  08:04 PM           348,832 ConsoleApplication1.ilk
09/07/2016  08:04 PM           864,256 ConsoleApplication1.pdb
               3 File(s)      1,258,656 bytes
               2 Dir(s)  420,200,681,472 bytes free

C:\TEMP\ConsoleApplication1\Debug>ConsoleApplication1.exe
Enter a number between 1 and 2
1
One is the loneliest number

C:\TEMP\ConsoleApplication1\Debug>ConsoleApplication1.exe
Enter a number between 1 and 2
3
The number was not in range.

C:\TEMP\ConsoleApplication1\Debug>
```
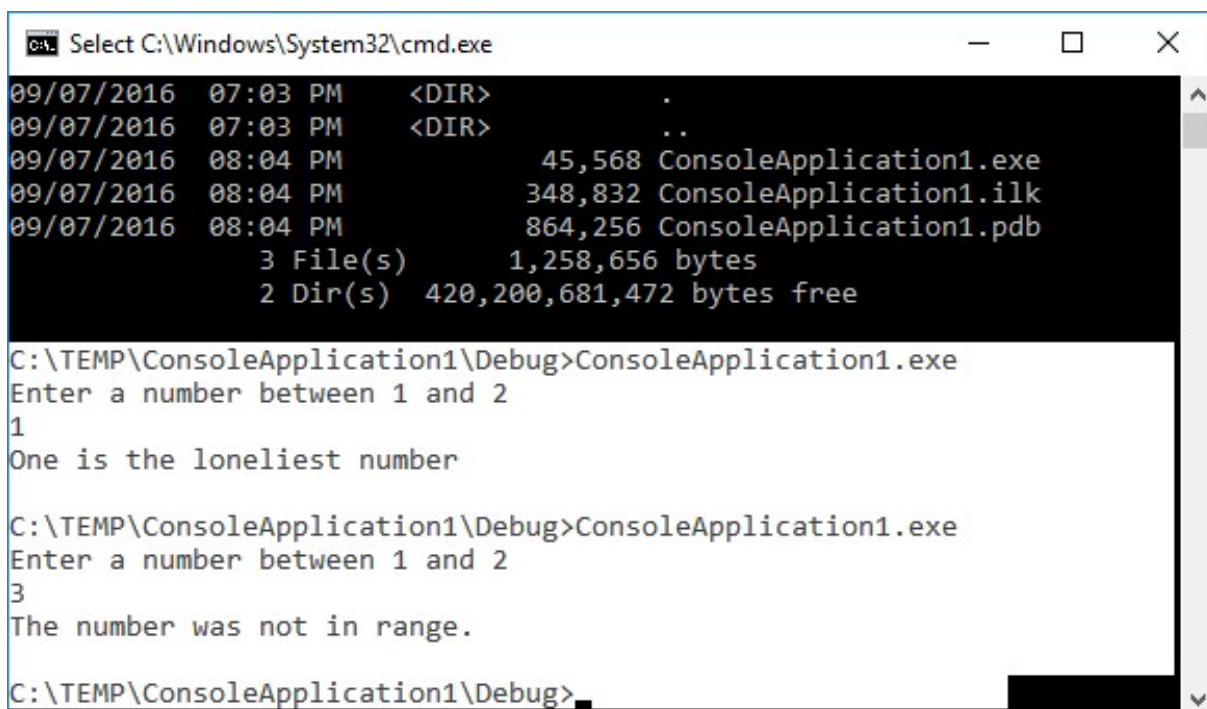
(see next page)

```
C:\TEMP\ConsoleApplication1\Debug > ConsoleApplication1.exe
Enter a number between 1 and 2
1
One is the loneliest number


C:\TEMP\ConsoleApplication1\Debug > ConsoleApplication1.exe
Enter a number between 1 and 2
3
The number was not in range.


C:\TEMP\ConsoleApplication1\Debug >
```

But that does not work on my computer!!

For all the machines in the labs on campus, that method of copying should work just fine. And
you can even highlight the text with the mouse and then use CTRL-C just like in Word. And
paste into the Command Prompt with CTRL-V.

But if you have a computer that was updated to Windows 10 (all of mine), and it does not seem
to work with your old Command Prompt icon you had on your desktop forever, you will have to
change its "Properties." Right click on the icon select "Properties" then the "Options" tab and
make sure that "Use legacy console" is NOT selected. If it is, unselect it, Apply and OK, then
start again. Now make sure that ALL of the "Edit Options" (especially "Quick Edit Mode") and
the "Text Selection" options are selected. If you changed any click Apply and OK. Next time you
open the Command Prompt from that icon, every thing should work correctly.