SVKM'S NMIMS Deemed to be UNIVERSITY | NAVI MUMBAI

MATLAB

Unit 7-Lecture 30

correcting and ending debugging

BTech (CSBS) -Semester VII

18 October 2022, 09:35AM

*few figures/content have been prepared/referred from internet source/books

Control Flow and Operators

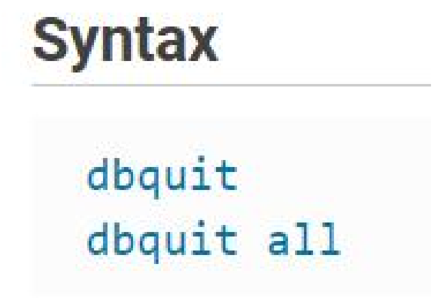
1) Debugging process,
2) preparing for debugging,
3) setting breakpoints,
4) running with breakpoints,
5) examining values,
6) correcting an M- file
7) correcting and ending debugging,

End Debugging Session

After you identify a problem, to end the debugging session, go to the **Editor** or **Live Editor** tab and click 🟥 Stop. After you end debugging, the normal >> prompt in the Command Window reappears in place of the K>> prompt. You no longer can access the function call stack.

To avoid confusion, make sure to end your debugging session every time you are done debugging. If you make changes to a file and save it while debugging, MATLAB ends the debugging session. If MATLAB becomes unresponsive when it pauses, press **Ctrl+C** to end debugging.

Quit debug mode



Syntax

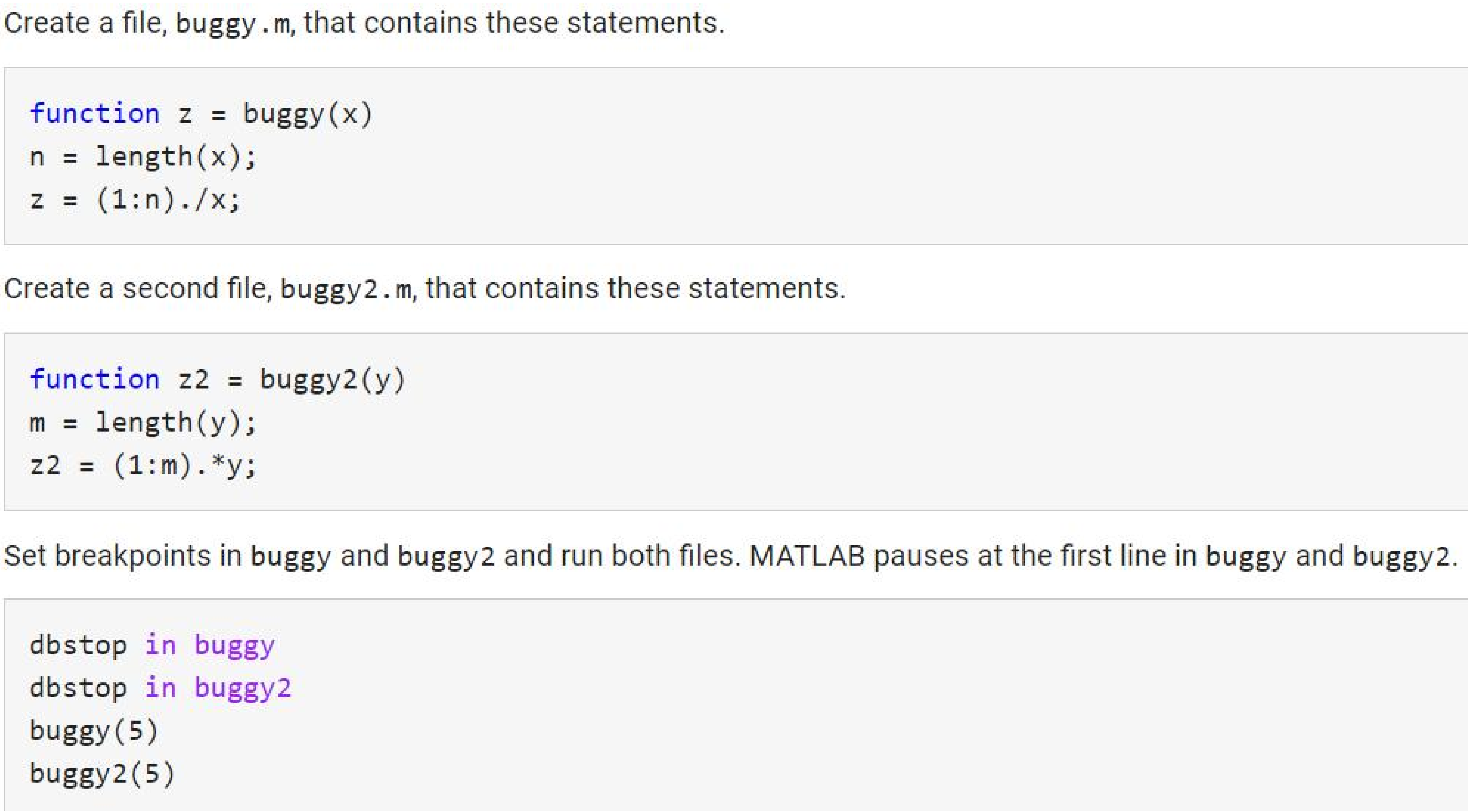
```
dbquit
dbquit all
```

dbquit terminates debug mode. The Command Window then displays the standard prompt (>>). The file being executed is not completed and no result is returned. All breakpoints remain in effect. If MATLAB® is in debug mode for more than one function, dbquit only terminates debugging for the active function.

For example, if you debug file1 and also debug file2, then running **dbquit** terminates debugging for file2, while file1 remains in debug mode until you run **dbquit** again. However, if you debug file3 and step into file4, then running **dbquit** terminates debugging for both file.

dbquit all ends debugging for all files simultaneously.

Quit debug mode



Create a file, buggy.m, that contains these statements.

```
function z = buggy(x)
n = length(x);
z = (1:n)./x;
```

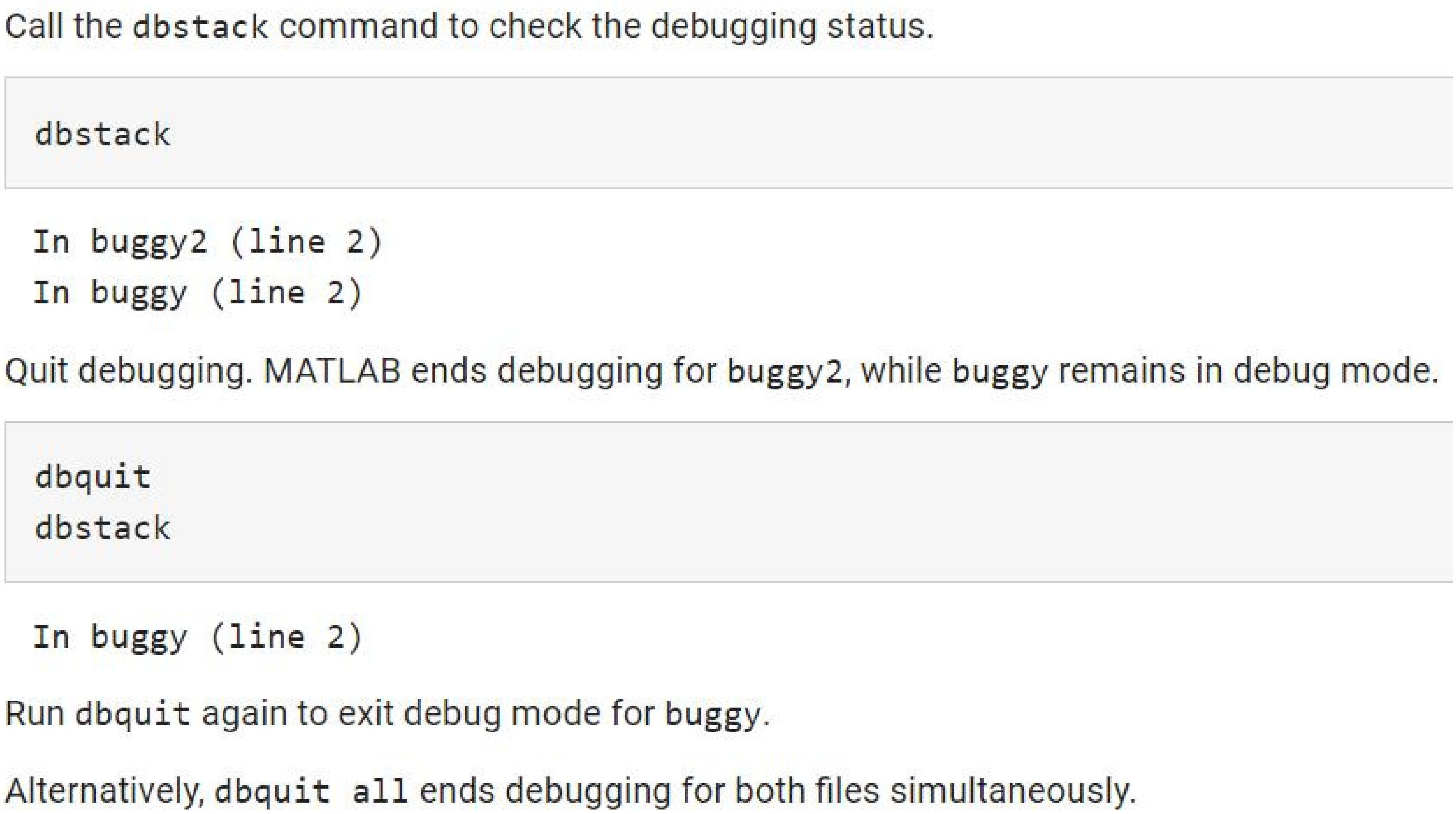
Create a second file, buggy2.m, that contains these statements.

```
function z2 = buggy2(y)
m = length(y);
z2 = (1:m).*y;
```

Set breakpoints in buggy and buggy2 and run both files. MATLAB pauses at the first line in buggy and buggy2.

```
dbstop in buggy
dbstop in buggy2
buggy(5)
buggy2(5)
```

Quit debug mode



Call the dbstack command to check the debugging status.

```
dbstack
```

```
In buggy2 (line 2)
In buggy (line 2)
```

Quit debugging. MATLAB ends debugging for buggy2, while buggy remains in debug mode.

```
dbquit
dbstack
```

```
In buggy (line 2)
```

Run dbquit again to exit debug mode for buggy.

Alternatively, dbquit all ends debugging for both files simultaneously.