

BE - Discussion #7, 2020-10-16

Announcements

- Homework #3 will be posted today → must be done individually as it will get you ready for the C portion of the course
- Exam #2 is two weeks from today! → Friday, 10/30
- Quiz #4 is this afternoon 4⁰⁰pm (Boston Time); tomorrow @ 7am for other time zones
 - 15 min, 5 min to upload
 - due by 5 pm

Review Last week's Quiz #3

Additional Notes for This Week

- the + operator cannot be used to concatenate 2 character vectors
- iscellstr() is determining whether or not a cell array contains only character vectors, not strings (old function, ignore name)
- When creating structures using struct(), as of version R2018b, strings can be used for field names (before they could only be char. vectors)
- make sure you know how structs are displayed (field name: value on separate lines)

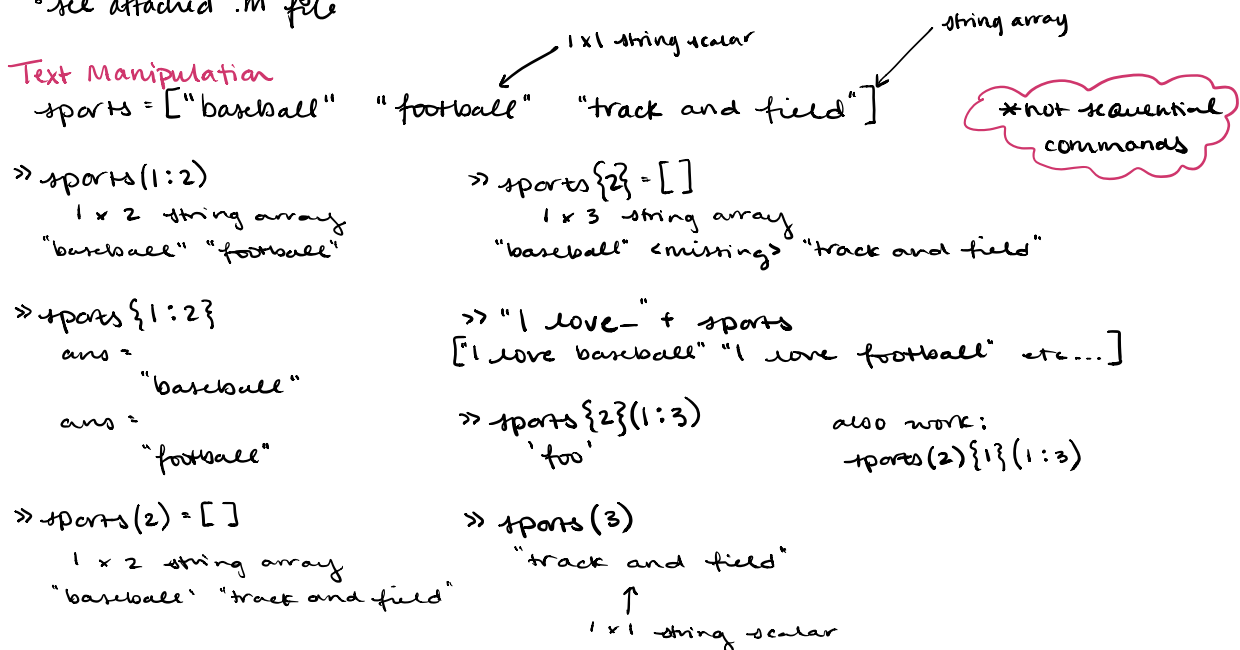
Review of Material

- cell arrays
- structures
- when to use cell array vs. structures
- vectors of structures
- nested structures
- text manipulation

Cell arrays + Structures

- examples of calling in Devin's example
- see attached .m file

Text Manipulation



Text Manipulation Functions

strtok()

ex. `strtok(strvar, delimiter)`

note that default delimiter is always a space

ex. `example = 'Well hello'`
`[f l] = strtok(example)`

`f = 'Well'`

`l = '_hello'`

note that `l` includes the delimiter (which in this case is a space)

strcat()

ex. `strcat(var1, var2)`

ex. `strcat('Well', 'hello')`
ans = 'Wellhello'

ex. `strcat('Well', '_hello')`
ans = 'Well_hello'

strrep()

ex. `strrep(string, oldstring, newstring)`

ex. `strrep('hello', 'lo', 'p')`
ans = 'help!'

→ `strrep('hello', 'lo', 'lp-me!')`
ans = 'help me!'

sprintf()

ex. `var = sprintf()`

*like `fprintf()` but can save to variable
*useful for titling (plots, labels, etc)
and user inputs

Functions need to know that work on strings but not char. vectors

+ `stringr()` `strjoin()` `strsplit()` `join()`