Digital World (2018)
Week 6, S2: Reading/Writing Files

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Refresher: overloaded operations
b.socrative.com, POSKITT5665

```
44 out = 5
45 a = "five (" + '5' + ")"
46 b = ''*out
47 c = "five" + out
48 d = 'five'*out
49 e = str(out) + ' five'
```

Which of the lines produces an error?

A) line 45   **B**) line 46   **C**) line 47   **D**) line 48   **E**) line 49

String operations: **replace**

```
19 sentence = 'everything was as fresh'
20 t = len( sentence.replace('as','x') )
```

The value of **t** is

A) 23   **B**) 22   **C**) 21   **D**) 20   **E**) 19

Reading from files

handle = open("fav_food.txt", "r")

. . .

handle.close()

fav_food.txt

Reading from files

handle.read()

handle.readline()

handle

handle.readlines()

for line in handle

- -

"roti canai\n".strip() = "roti canai"

Multi-dimensional data?

-4.89898989899	-269.1728292
-4.79797979798	-255.76800244
-4.69696969697	-242.77933606
-4.59595959596	-230.200646399
-4.49494949495	-218.025749795
-4.39393939394	-206.248462587
-4.29292929293	-194.862601116
-4.19191919192	-183.861981719
-4.09090909091	-173.240420736

…

Multi-dimensional data?

line.split()

line = -4.89898989899   -269.1728292

[-4.89898989899,
-269.1728292]

-4.7979797979798   -255.76800244
-4.6969696969697   -242.77933606
-4.5959595959596   -230.200646399
-4.4949494949495   -218.025749795
-4.3939393939394   -206.248462587
-4.2929292929293   -194.862601116
-4.1919191919192   -183.861981719
-4.0909090909091   -173.240420736

...

Summary

- files can be read and written to via a handle

- typically processed line-by-line, e.g. via for-loops and lists

- str.strip() returns a copy of str with preceding/trailing whitespace characters removed

- str.split(d) breaks str into a list of strings, using d as the delimiter (or whitespace by default)