AP CSP

Unit 4:

Data Acquisition

7	**8** 🖥️ 4-1-A Data Acquisition & Analysis HW: Google CR	**9** **10** 🖥️ 4-1-B More Data Acquisition & Analysis HW: Google CR	**11** 4-2 Models & Simulations HW: Google CR
14 🖥️ 4-3 Using Data Simulations HW: Google CR	**15** 🖥️ 4-4-A File Input & Output w/Python HW: Google CR	**16** **17** 🖥️ 4-4-B More File Input & Output w/Python HW: Finish In-Class Work	**18** 🖥️ 4-5-A Data Collection, Analysis & Simulation HW: Finish Classwork
21 NO SCHOOL MLK Jr. Day	**22** 🖥️ 4-5-B More Data Collection, Etc. HW: Finish Classwork	**23** **24** 🖥️ 4-6-A Hypothesis Testing with Simulations Using NetLogo NO HW	**25** 🖥️ 4-6-B More Hypothesis Testing HW: Finish Classwork (Due 1/29)
28 🖥️ 4-6-C Hypothesis Testing Conclusion HW: Finish Classwork	**29** 🖥️ 4-7 Review For Test	**30** **31** 4-8 **Test** Work on Explore Task	🖥️ Finish Explore Task

🖥️ Computer is used today

REPLACED BY ANALYTICAL SOFTWARE. I SHOULD'VE SEEN IT COMING.

STORAGE

Search ID: dcrn1509

CARTOONSTOCK.com

Numbers have an important story to tell. They rely on you to give them a voice."
~Stephen Few
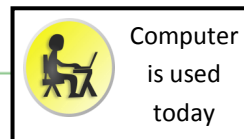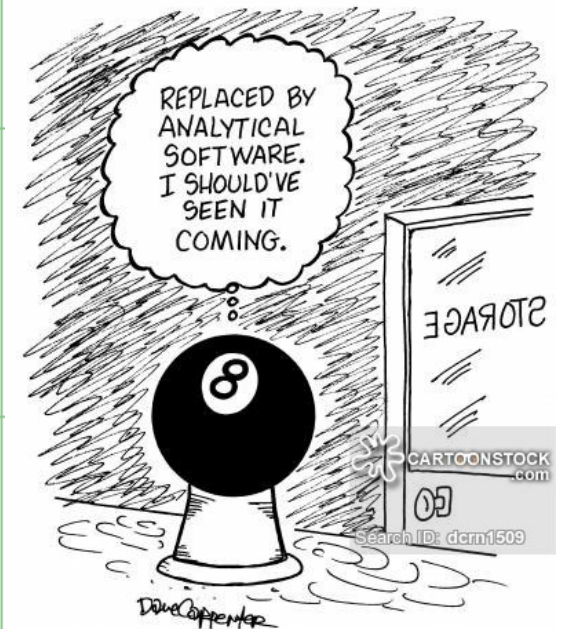
Python Everywhere Textbook	Python 3.6 Quick Reference	Video: Using files in Python
https://bit.ly/2gSWkSS	https://bit.ly/1QbX27o	https://bit.ly/2TrEAMb

Python Quick Reference

Selection

```
If (boolean_exp):
        stmt…
elif (boolean_exp):
        stmt….
else
        stmt...
```

Repetition (while)

```
while (boolean_exp):
        stmt...
```

Repetition (for counting loop)

```
for variable in range(start, end, step):
        stmt...
```

Input/Output

```
print()
variable = input("message")
```

Random Numbers

```
import random
integer_variable=random.randInt(min,max)
float_variable=random.random() #0.0-1.0
```

Files

```
variable = open("filename", "mode")
        Modes:      "w" = write
                    "r" = read
                    "a" = apprend

To Read:
        variable.read()
        variable.readline()

To Write:
        variable.write()
        variable.writeline()
```

Functions

Set up function
```
def functionName(parameters)
        function body…
```
Call function
```
        if a return: variable = functionName(values)
        if no return: functionName(values)
```

Casting Variable Types

```
integerVariable = int(otherTypeValue)
floatVariable = float(otherTypeValue)
stringVariable = str(otherTypeValue)
```