15-110 Recitation 12
04/09/2020

Covering: encryption, security, internet, modeling, parsing
Reminder: HW5 due today!
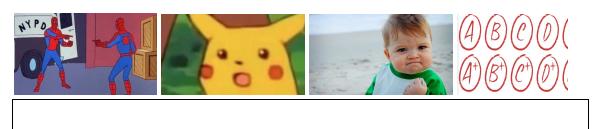

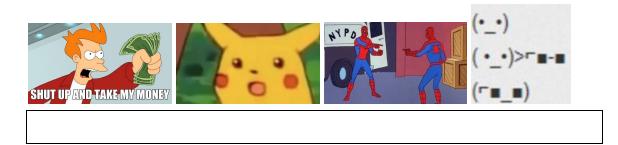**Problem 1:** meme cipher

Carnegie Mellon	surprised	I
good	cool	grade

<u>Encrypt:</u> (we will not grade on artistic ability XP)

Carnegie Mellon is cool.

I got a good grade at Carnegie Mellon.

Decrypt:

Answer these questions:

What is the plaintext?	
What is the ciphertext?	
What is the key?	
How many possible keys are there?	
What is the runtime to break this cipher? *	

* Keep in mind the adversary knows that each meme corresponds to a word, but they don't know which words are being used in the message. This means they would have to check each possibility in the dictionary.

Problem 2: security review

Match the description to the type of security attack covered in lecture:

every student in 15-110 goes to gradescope at the same time to get their midterm 2 grades	
one malicious student connects to a class wifi access point and looks at the packets for their roommate's andrew ID and password in order to practical joke them	

Problem 3: internet fast facts

Answer T/F

The internet is governed by a series of protocols, HTTPS is one of them.	
The net neutrality debate surrounds whether internet users should be able to create biased content and share it on public internet forums.	
There are an infinite number of IP addresses.	
All packets routed back to your computer from a website are guaranteed to be routed through the same wire.	

Problem 4: File I/O

Take the csv file from the website and the starter code, and write a function that prints the department_name column from the csv. Feel free to explore the output of readCSVFile (it is a 2D list) to figure out how to best do this is also an exercise to make sure you can do File I/O properly, so reach out to your TA if you have trouble reading in the file for any reason. Note that the csv file should be in the same directory as your python code.