[15-110] recitation 11

Recap

- encryption and authentication
- Internet

Reminders!

HW 5 due Monday!

Submit exam regrade requests via **Gradescope**

Problems

mapReduce

Problem

Suppose we make a mapReduce function to count the number of files that have an even number of even numbers. Define the mapper, collector, reducer function.

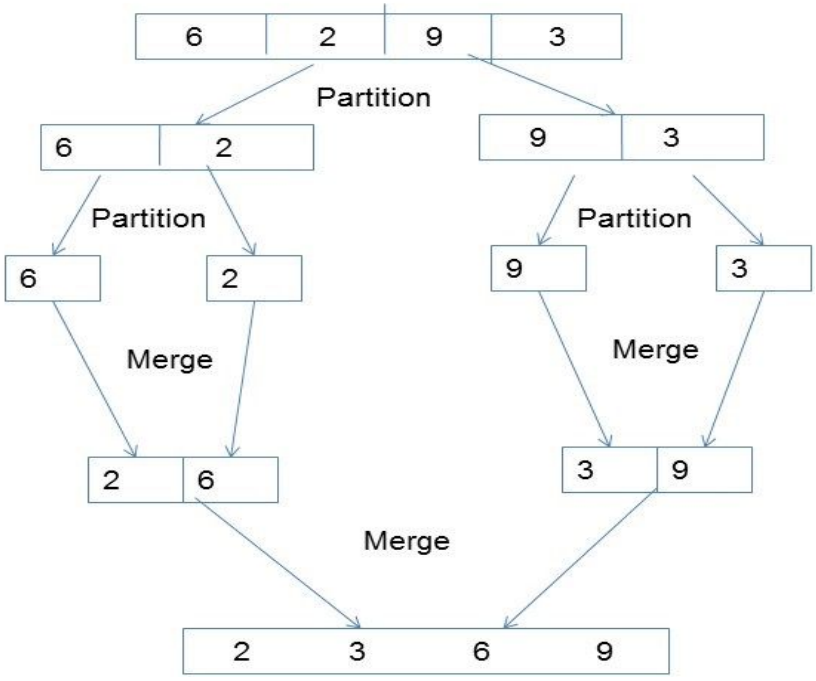
encode/decode piglatin

Problem

Write a method given a string, encodes each word into pig latin.
Write another method that decodes words in piglatin back into english.
Note: Assume for the sake of simplicity that pig latin takes the first **letter** of each word, appends it to the end of the word and adds “ay”.

encodePigLatin(“hi my im scottie”) -> “ihay ymay miay cottiesay”
decodePigLatin(“omputercay ciencesay siay wesomeay”) -> computer science is awesome

mergesort concurrency



Problem What steps can be done in parallel?

security review

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

1) every student in 15-110 goes to gradescope at the same time to get their midterm 2 grades
2) one malicious TA emails a python file which, when opened, deletes all of your homework off your computer
3) 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.

internet T/F

Problem	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.