Final Project Preparation

AWS vs. Hadoop

AWS

- For more than big data
- More recently updated
- Requires money/school credit
- Allows you to use existing programs for data analysis

Hadoop

- Only big data
- Older
- Free
- Utilize novel programs for data analysis

Vs of Big Data

Volume: How much?

Variety: What kind?

Velocity: How fast?

Veracity: How trustworthy?

Value: Why?

Data Streaming

- Real-time data
- Includes data generated by machine or IoT
- How do you store / extract it?
 - Kafka
 - Flume
 - Flink
- How do you analyze it?
 - Spark Streaming
 - Storm
 - Flink

Pig vs. Hive

Pig

 Uses a SQL-like language (Pig Latin)

- Slower
- Data = relations
- More flexible

Hive

 Uses a version of SQL (HiveQL)

- Quicker
- Data = tables
- Easier to use

MapReduce

The original big data system

Map – find the data you need and transform it

Reduce – aggregate it

Questions?