Large Scale Data Management

Hive Lab Guide 8

2020/2021

Consider the IMDb dataset available at https://www.imdb.com/interfaces/.

Steps

- 1. Load *name.basics* as a Parquet file, and then as a Parquet file partitioned by birth year.
- 2. Using RDD operations compute the total number of actors/actresses and then count those born in the 1960s decade.
- 3. Using SQL compute the total number of actors/actresses and then count those born in the 1960s decade.
- 4. Measure the times needed by each of these operations with the two Parquet files.

Ouestions

- 1. How do solutions with Spark SQL compare with those using Spark RDDs in terms of efficiency?
- 2. Can you explain the different results?

Learning Outcomes Compare SQL and Spark dataflow paradigms for distributed data processing. Recognize the impact of metadata and optimization in query efficiency.