2/27/2019 Homework 2

Homework 2

Submit Assignment

Due Mar 12 by 11:59pm **Points** 100 **Submitting** a file upload

Available Feb 20 at 12am - Mar 12 at 11:59pm 21 days

Optimization

Pick **any one of the optimizations** described in the optimizations catalog paper (also covered in the class): Operator Reordering, Redundancy Elimination, Batching, Fusion, Fission, Operator Separation, Load-balancing, Load-shedding, Algorithm Selection

and implement the same benchmark application described. Try to reproduce the graph from the paper.

Guidelines

- 1. People with a virtual machine or laptop may be limited in their choice of optimizations (e.g. you will not be able to deal with placement).
- 2. Please make appropriate assumptions:
- a. Define an appropriate workload (what data you will use), how you will stream it etc.
- b. Define how you will measure the performance, such as throughput, selectivity etc.

Please make these assumptions clear in your writeups. Please also include a plot of the performance graph you are trying to reproduce.

Deliverables

Please put the code into a single file (or directory).

Tar/gz or zip the contents of your homework in to a single file.

Please upload your zipped submission to courseworks. Do not include binaries or jar files. If you have data files, please just include a small sample of it.

Please include a short write-up explaining your assumptions and implementation (1-2 pages).