

# Class 10 Final Project

Elements of Databases

Nov 19, 2021

# Final Project: The What

- Measure the write performance of a database system:
  - MySQL or Postgres
  - Using Compute Engine instances (Virtual Machines)
  - Load ~8 million records into a database table from Python
- Try to improve the write performance through various experiments:
  - Batched inserts (small, medium, large batch sizes)
  - System variable tuning
  - Adding hardware resources (CPUs, RAM, Network)

# Final Project: The Why

- Many online applications and services are sensitive to the performance of their databases. Can you think of a few examples?
- You will likely be asked to evaluate the selection of a database system in the near future. You may even be responsible for making the decision on which database product to use.
- Gain some hands-on experience doing end-to-end performance testing and tuning through various experiments.

# Final Project: The How

- Two project milestones: Milestone 1 and Milestone 2
- Work collaboratively with your project partner on both milestones
- Work in your assigned Zoom breakout room
- Use [sign-up sheet](#) to request help from instructors
- Go back to Main Room for the occasional instapolls and questions/issues that come up