

# Intro. to SQL

Basic Syntax and Filtering

2021-02-10



# Sign in sheet

Sign in Here: <https://tinyurl.com/9tm6022z>

## Important links

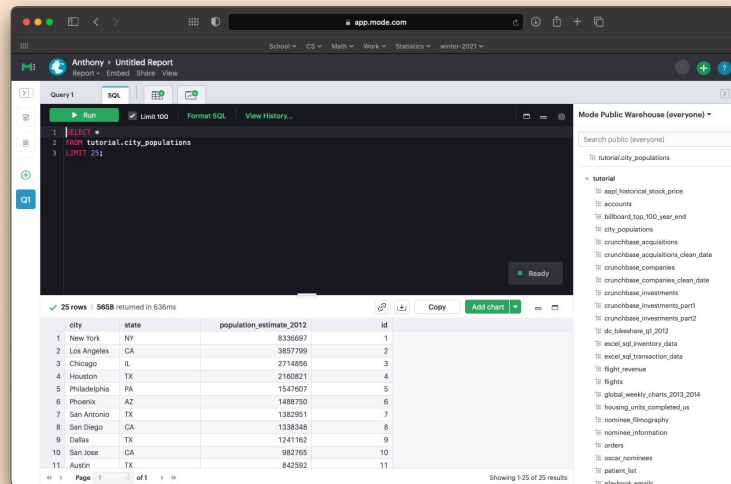
- <https://github.com/Davis-Data-Science-Club/SQL-workshop-1-aggregation-and-filtering>
- <https://mode.com>

# Agenda

1. Workshop Check In/Mode Sign Up
2. Github/Mode Introduction
3. General SQL Introduction
  - Syntax/Test Queries

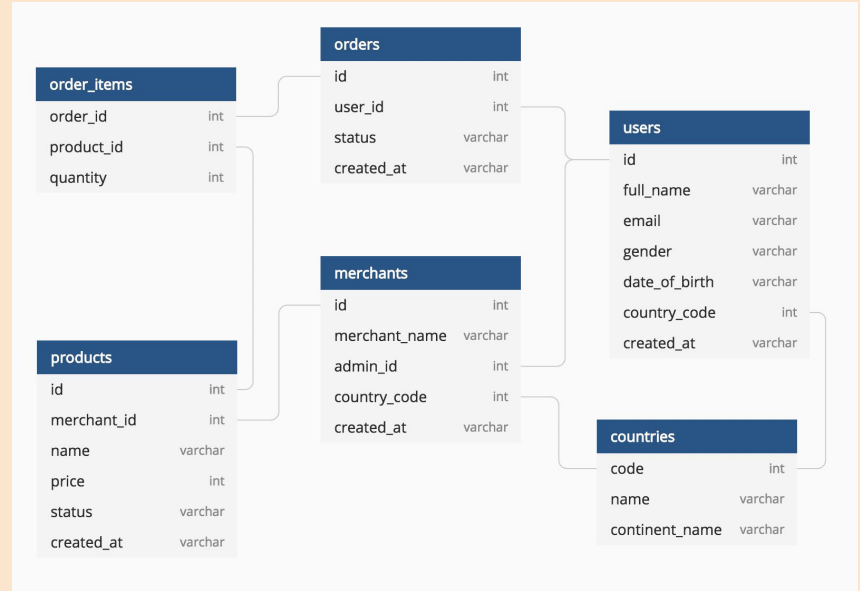
## Questions

- Build the query on your own
- Solve together/discussion

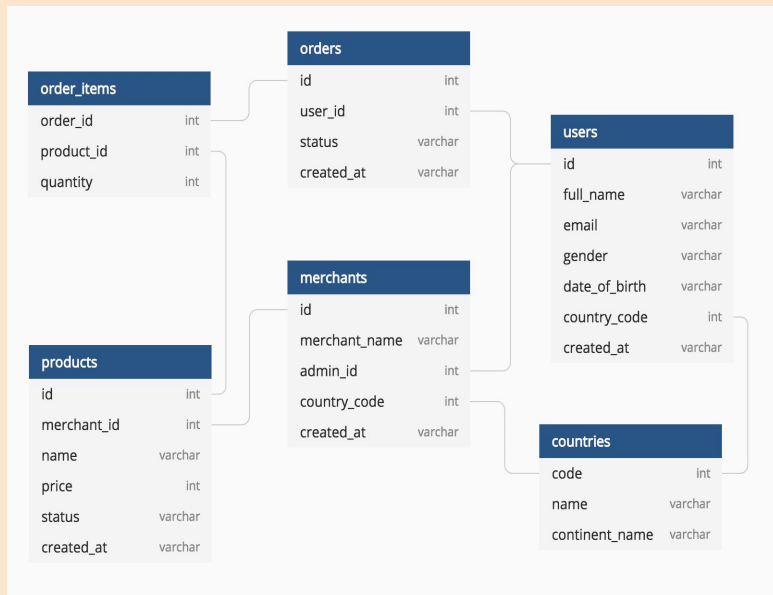


# What is a Database?

- Scalable storage system
- SQL vs NoSQL
  - o Relational
  - o Not-relational, dynamic schema
- Usually hosted on a server
- Data is added multiple ways,
  - o Manually
  - o Forms
  - o Website
- Schema - map of your database
  - o important to plan out ahead of time



# Types of Databases



Relational - Tabular  
Data split across tables

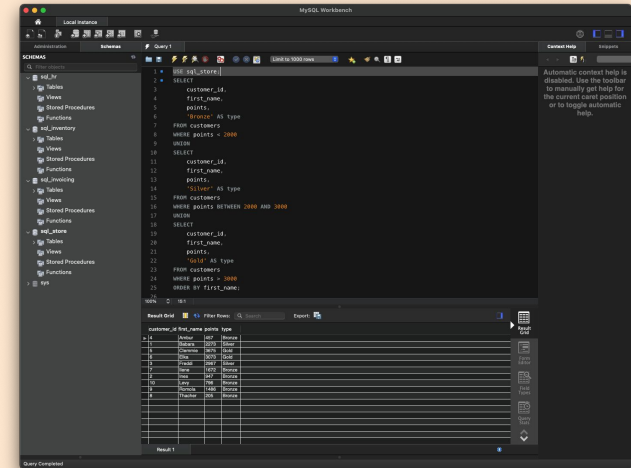
## Students Document

```
{  
  _id : "5373aadadcac133aad5b6660",  
  name : "kaushal patel",  
  email : "kp@example.com",  
  courses : {  
    course_name : "java",  
    fees : "5000",  
    duration : "3",  
    professor : "g.r."  
  }  
}
```

Non-Relational - Document  
Related data contained in a single document

# Hosting/Connecting to a Database

- Hosting services: MSFT SQL Server, Oracle's MySQL server, AWS Redshift
- Use an app such as SQLWorkbench, even the mode.com editor works.
- Log in through an IP address, port number, etc.
- Start writing your queries in a GUI
- Able to export data in multiple formats



# Social Media

- Check us out on social media
  - o Discord: <https://discord.com/invite/TvEc7ca>
  - o Facebook: <https://www.facebook.com/data.ucd/>
  - o Github: <https://github.com/Davis-Data-Science-Club>
  - o Instagram: <https://www.instagram.com/data.ucd/>
- Next events:
  - o Alumni Talk
  - o Workshop 2: My First Kaggle Competition
  - o Workshop 3: SQL 2 Joins