The purpose of this project is to show some examples of SQL coding. GitHub only allows 25MB to be uploaded per file. The deleted queries are below.

The data is from ourworldindata.org for Monkeypox and COVID from 10/15/22. I used Microsoft Access to process this data. COVID data was used minimally, but I may delve further in the future. I used Microsoft Excel to format some data prior to Access, like to add the “locdate” key to both datasets which I used to join the data.

Microsoft Access unfortunately doesn’t allow for comments. I will give some comments below to explain my intentions. Also, I planned to make views in this project, but my Access subscription couldn’t make views because I could just save a query.

**QUERY 1**

-- Make sure my data uploaded properly

SELECT \*

FROM COVID RIGHT JOIN Monkeypox ON COVID.locdate =[Monkeypox].[locdate]

WHERE COVID.continent is not null

ORDER BY 3, 4;

**QUERY 2**

-- Select specific data after a join

SELECT COVID.location, Monkeypox.date, Monkeypox.total\_cases, Monkeypox.new\_cases, Monkeypox.total\_deaths, COVID.population

FROM COVID RIGHT JOIN Monkeypox ON COVID.locdate =[Monkeypox].[locdate]

WHERE COVID.continent is not null

ORDER BY 1, 2;

**QUERY 3**

-- Total Cases vs Total Deaths

-- Compare likelihood of dying through contracting Monkeypox and COVID

SELECT COVID.location, COVID.date, Monkeypox.total\_cases, Monkeypox.total\_deaths, (Monkeypox.total\_deaths/Monkeypox.total\_cases)\*100 AS MonkeyPoxDeathPercentage, (COVID.total\_deaths/COVID.total\_cases)\*100 AS COVIDDeathPercentage

FROM COVID RIGHT JOIN Monkeypox ON COVID.locdate =[Monkeypox].[locdate]

WHERE COVID.continent is not null

ORDER BY 1, 2;

**QUERY 4**

-- Shows percentage of population infected with Monkeypox and COVID

SELECT COVID.location, COVID.date, COVID.population, Monkeypox.total\_cases, (Monkeypox.total\_cases/COVID.population)\*100 AS MonkeypoxPercentPopulationInfected, (COVID.total\_cases/COVID.population)\*100 AS COVIDPercentPopulationInfected

FROM COVID RIGHT JOIN Monkeypox ON COVID.locdate =[Monkeypox].[locdate]

WHERE COVID.location = 'United States'

ORDER BY 1, 2;

**QUERY 5**

-- Countries with Highest Monkeypox Infection Rate with respect to population

SELECT COVID.location, AVG(COVID.population) AS Population, MAX(Monkeypox.total\_cases) AS MonkeypoxHighestInfection, (MonkeypoxHighestInfection/Population)\*100 AS PercentPopulationInfected

FROM COVID RIGHT JOIN Monkeypox ON COVID.locdate =[Monkeypox].[locdate]

GROUP BY COVID.location, Population

ORDER BY MAX(Monkeypox.total\_cases) DESC;

**QUERY 6**

-- Countries with Highest Death Count per population

SELECT COVID.location, MAX(CInt(Monkeypox.total\_deaths)) AS TotalDeathCount

FROM COVID RIGHT JOIN Monkeypox ON COVID.locdate =[Monkeypox].[locdate]

WHERE COVID.continent IS NOT null

GROUP BY COVID.location

ORDER BY MAX(CInt(Monkeypox.total\_deaths)) DESC;

**QUERY 7**

-- Continents with highest death counts

SELECT COVID.continent, MAX(CInt(Monkeypox.total\_deaths)) AS TotalDeathCount

FROM COVID RIGHT JOIN Monkeypox ON COVID.locdate =[Monkeypox].[locdate]

WHERE COVID.continent IS NOT null

GROUP BY COVID.continent

ORDER BY MAX(CInt(Monkeypox.total\_deaths)) DESC;

**QUERY 8**

-- Global numbers

SELECT SUM(Monkeypox.new\_cases) AS Total\_Cases, SUM(CInt(Monkeypox.new\_deaths)) AS Total\_Deaths, SUM(CInt(Monkeypox.new\_deaths))/SUM(CInt(Monkeypox.new\_cases))\*100 AS DeathPercentage

FROM COVID RIGHT JOIN Monkeypox ON COVID.locdate =[Monkeypox].[locdate]

WHERE COVID.continent IS NOT null

GROUP BY Monkeypox.date

ORDER BY 1 DESC , 2;

**QUERY 9**

-- This is just an example of counts by continent and country. This is also done at the beginning to ensure data is there and to start basic analysis/understanding of dataset

SELECT MAX(COVID.continent) AS continent, MAX(COVID.location) AS location, COUNT(COVID.date) AS dates, COUNT(COVID.population) AS population, COUNT(COVID.new\_vaccinations) AS new\_vaccinations

FROM COVID

WHERE COVID.continent IS NOT null

GROUP BY location

ORDER BY 1, 2;

**PARTITION EXAMPLE**

-- Although this doesn’t make much sense data-wise, I did make a partition example to accustom myself with the Partition-making process in Access. It’s different from what I’m used to.

SELECT PARTITION(Monkeypox.total\_cases,40,240,20) AS PartitionExample

FROM Monkeypox

GROUP BY Partition(Monkeypox.total\_cases,40,240,20);