Assignment 1: Database Searches

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Part 1. Import the COVID.csv file into your MySQL or other DBMS that you have installed. Answer the questions below for this data.

File import snaps:

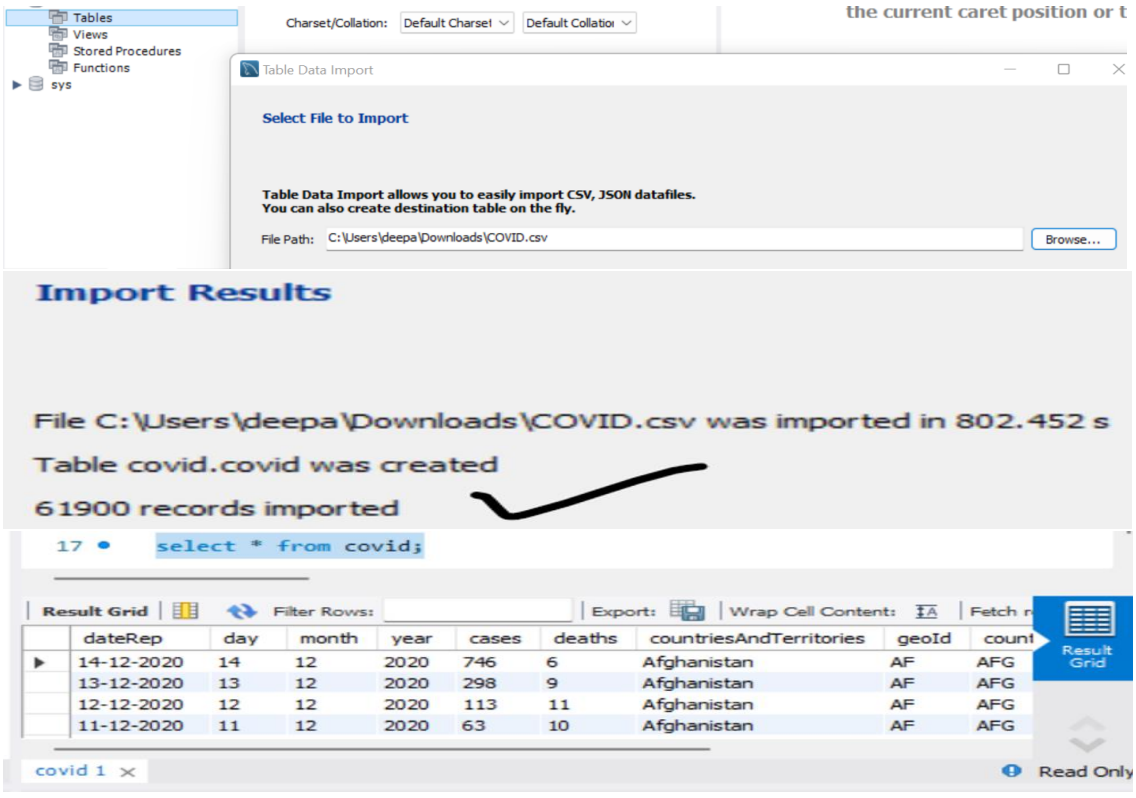
Inserted given file by table insert wizard after creating below database in MySql

MySQL codes for create database and show covid file:

create schema 'covid';

use covid;

select * from covid;

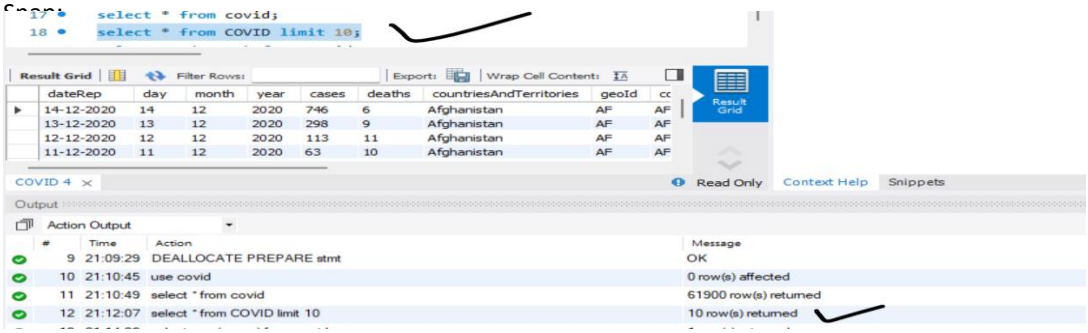


Answers for all questions are below:

1) Show top 10 lines from TABLE 1

MySQL code: select * from COVID limit 10;

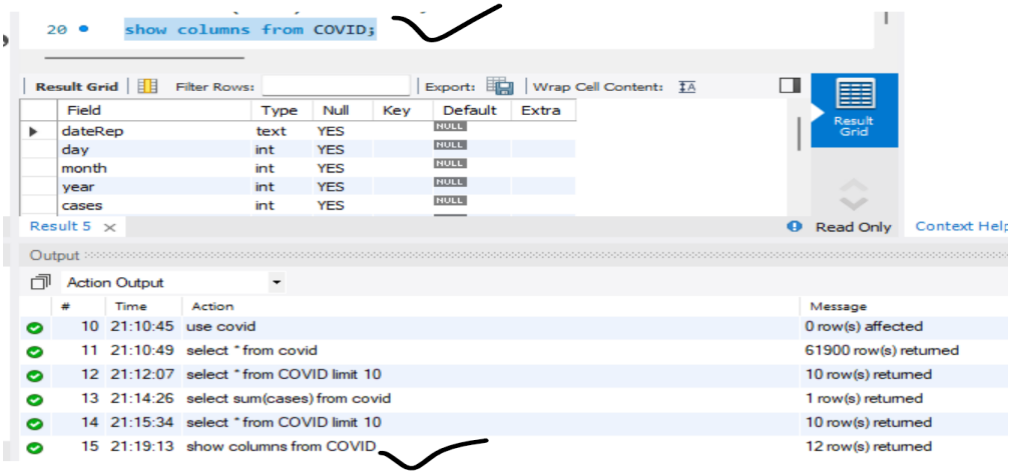
Snap:



2) Show/list columns of this table

MySQL code: show columns from COVID;

Snap:

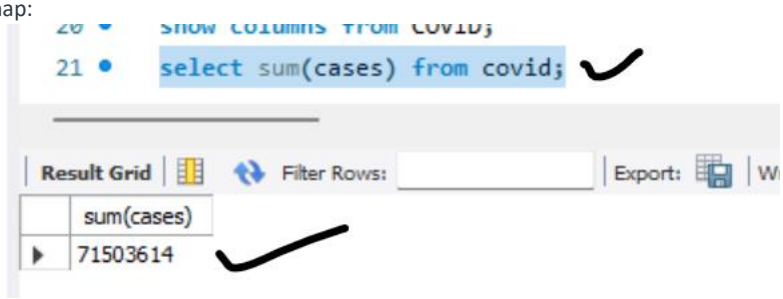


3) What is the total of cases

MySQL code: select sum(cases) from covid;

Answer: 71503614

Snap:

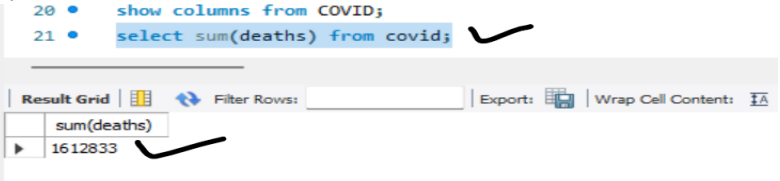


4) What is the total of deaths

MySQL code: select sum(deaths) from covid;

Answer: 1612833

Snap:



5) What are unique territories

MySQL code: select distinct(countriesAndTerritories) from covid;

unique territory.xlsx

MySql output saved in given excel file

6) Show total cases, deaths, in different countries

MySQL code: select countriesAndTerritories,
sum(distinct cases),
sum(distinct deaths) from covid
group by countriesAndTerritories;

no of cases deaths in different countries.xls:

MySql output saved in given excel file

7) Show rate of death (deaths/cases) that occur in Afghanistan for each month. Display data in chronological order

MySQL code: select month,
year,
countriesAndTerritories,
sum(deaths / cases) deathrate
from covid
where countriesAndTerritories = 'Afghanistan'
group by month, year
order by year, month asc;

month	year	countriesAndTerritories	deathrate
12	2019	Afghanistan	NULL
1	2020	Afghanistan	NULL
2	2020	Afghanistan	0
3	2020	Afghanistan	0.4209
4	2020	Afghanistan	1.3253
5	2020	Afghanistan	0.5461
6	2020	Afghanistan	1.042
7	2020	Afghanistan	4.5512
8	2020	Afghanistan	1.5137
9	2020	Afghanistan	1.8844
10	2020	Afghanistan	1.4821
11	2020	Afghanistan	1.3493
12	2020	Afghanistan	1.0393

Part 2: create the tables for the four databases that we covered in class. See attached document for screenshot but you can also review the posted powerpoints. Use primary keys or other constraints as needed. Use the mysql tool to generate an ER diagram to show all tables you've just created and their relationships. Include a screenshot to the TA's

Student response:
Please find created tables & generated ERD diagrams in MySQL:

Tables:

```
49 • select * from courses;
```

Result Grid | Filter Rows: | Edit:

cid	title	unit
CSG339	Data Mining	4
CSU430	Database Design	4
CSG131	Transaction Processing	4
NULL	NULL	NULL

```
48 • select * from students;
```

Result Grid | Filter Rows: | Edit:

ssn	name	phone
1111	John	617-373-5120
2222	Alice	781-322-6084
3333	Victor	617-442-7798
NULL	NULL	NULL

```
50 • select * from enroll;
```

Result Grid | Filter Rows: | Export:

ssn	cid	time
1111	CSU430	Fall'03
1111	CSG339	Spring'04
2222	CSG131	Winter'03
2222	CSG339	Spring'04
3333	CSU430	Winter'01

```
51 • select * from departments;
```

Result Grid | Filter Rows: | Edit:

did	dname	address
1	computer science	# 161 cullinane
2	electrical engineering	# 300 egan
3	physics	# 112 richard
NULL	NULL	NULL

PNG files of ERD diagrams generated from MySQL: