

## 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;

The screenshot shows the MySQL Table Data Import wizard and the Import Results window. The wizard is in the 'Select File to Import' step, showing the file path 'C:\Users\deepa\Downloads\COVID.csv'. The Import Results window shows that the file was imported successfully, creating the 'covid.covid' table with 61900 records. Below the results, a SQL query 'select \* from covid;' is entered in the command line, and the resulting data is displayed in a grid.

dateRep	day	month	year	cases	deaths	countriesAndTerritories	geoId	count
14-12-2020	14	12	2020	746	6	Afghanistan	AF	AFG
13-12-2020	13	12	2020	298	9	Afghanistan	AF	AFG
12-12-2020	12	12	2020	113	11	Afghanistan	AF	AFG
11-12-2020	11	12	2020	63	10	Afghanistan	AF	AFG

Answers for all questions are below:

1) Show top 10 lines from TABLE 1

MySQL code: select \* from COVID limit 10;

17 • `select * from covid;`  
18 • `select * from COVID limit 10;`

dateRep	day	month	year	cases	deaths	countriesAndTerritories	geoId	cc
14-12-2020	14	12	2020	746	6	Afghanistan	AF	AF
13-12-2020	13	12	2020	298	9	Afghanistan	AF	AF
12-12-2020	12	12	2020	113	11	Afghanistan	AF	AF
11-12-2020	11	12	2020	63	10	Afghanistan	AF	AF

COVID 4 × Read Only Context Help Snippets

Output

#	Time	Action	Message
9	21:09:29	DEALLOCATE PREPARE stmt	OK
10	21:10:45	use covid	0 row(s) affected
11	21:10:49	select * from covid	61900 row(s) returned
12	21:12:07	select * from COVID limit 10	10 row(s) returned

2) Show/list columns of this table

MySQL code: `show columns from COVID;`

Snap:

20 • `show columns from COVID;`

Field	Type	Null	Key	Default	Extra
dateRep	text	YES		NULL	
day	int	YES		NULL	
month	int	YES		NULL	
year	int	YES		NULL	
cases	int	YES		NULL	

Result 5 × Read Only Context Help

Output

#	Time	Action	Message
10	21:10:45	use covid	0 row(s) affected
11	21:10:49	select * from covid	61900 row(s) returned
12	21:12:07	select * from COVID limit 10	10 row(s) returned
13	21:14:26	select sum(cases) from covid	1 row(s) returned
14	21:15:34	select * from COVID limit 10	10 row(s) returned
15	21:19:13	show columns from COVID	12 row(s) returned

3) What is the total of cases

MySQL code: `select sum(cases) from covid;`

Answer: 71503614

Snap:

20 • `show columns from COVID;`  
21 • `select sum(cases) from covid;`

sum(cases)
71503614

4) What is the total of deaths

MySQL code: `select sum(deaths) from covid;`

Answer: 1612833

Snap:

20 • `show columns from COVID;`  
21 • `select sum(deaths) from covid;`

sum(deaths)
1612833

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;`

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

48 • `select * from students;`

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;`

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;`

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:

