**Project Step 3**

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**Short Desciription**

The idea of my project is keeping data of covid datas which is belongs to USA. It is important for government to arrange vaccination for states. The illness (covid-19) is spreading people with different speed state by state. So this database system is helping them to distribute vaccines state by state . As we can see on datas , some of states needed these vaccination more then others.

**Type Of Data Usage**

1. Yes I use real data . I found it from Kaggle (<https://www.kaggle.com/datasets/brendan45774/covid19-us-marchseptember?select=1-1-21+US+covid19.csv>)  
   I use real datas for all of my table except one of my column ‘location’ on died\_in table .
2. No I did not.
3. Yes, I use (<https://www.mockaroo.com/> ) site for generating locations.

**I design a GUI.  
A screenshot of a computer menu

Description automatically generated with medium confidence**

**Queries :**

1.How many people got covid last 7 days at given State Code  
  
query1=select cases\_last\_7\_days

from get\_sick

where state\_code =’q1’

**Output for ‘IL’ as input : A screen shot of a computer screen

Description automatically generated with low confidence**

2. 2. Display state code and the total death where the death rate per 100000 is greater then given number

query2=select st\_code\_died,total\_death

from death,death\_rate,died\_in

where death\_state=state\_death AND death\_state=died\_state AND death\_rate\_per\_100000 > ‘q2’

**Output for ‘100’ as input:**  
**A screenshot of a computer

Description automatically generated with medium confidence**

3. Display the state region number where the cases last 7 days are greater then given number

query3 =Select st\_region,count(st\_region) as number\_of\_states

From states\r\n"

Where st\_name IN ( Select sta\_name

From get\_sick

Where cases\_last\_7\_days>' q3')

group by st\_region;

**Output for ‘100’as Input:**

**A screenshot of a computer display

Description automatically generated with low confidence**

4. List the state names and total deaths \twhere the confirmed death number is greater then given number

query4 = select death\_state,total\_death

from death

confirmed\_death >'q4'

**Output for ‘5000’ as input**

**A screenshot of a display table

Description automatically generated with medium confidence**

5. List the death number and state names

query5=select st\_name,total\_death

states,died\_in,death

where st\_code=st\_code\_died AND state\_death=death\_state;

**Output : A screenshot of a computer display

Description automatically generated with medium confidence**

6.List the state codes and state names where the case rate epr 100000 is more then 8000

Select st\_code , st\_name

from states,case\_rate

where st\_name=case\_state AND case\_rate\_per\_100000>8000;

**Output :**

**A screenshot of a computer display table

Description automatically generated with medium confidence**

7. List the state names and total death numbers where the probable case is greater then 100000

query7=select death\_state,total\_death

from death

where death\_state IN ( select state\_name

from case\_states

where confirmed\_case >100000);

**Output :**

**A screenshot of a computer

Description automatically generated with medium confidence**

8. List the state number of west regions where the death rate per 100000 is in given range

query8=select count(st\_name) as state\_number

from states

st\_region ‘West’ AND st\_name IN(

select died\_state

from death\_rate

where death\_rate\_per\_100000   
 > 'minimum' AND death\_rate\_per\_100000 < 'maximum');

**Output for ‘50’ as min, ‘150’ as max input :**

**A screen shot of a computer

Description automatically generated with medium confidence**

**Edits/Modifications/Adjustments  
  
Relational Shema : I removed the dates of the data and I just import a specific date which is ‘’01-01-2021”:**

**I got some error about multiple primary keys so I remove some of them.**

**A picture containing text, diagram, screenshot, font

Description automatically generated**

**Queries : Since I removed the ‘date’ from all of my tables, I changed all of my queries :**

**1.How many people got covid last 7 days at given State Code**  
  
query1=select cases\_last\_7\_days

from get\_sick

where state\_code =’q1’

**2.Display state code and the total death where the death rate per 100000 is greater then given number**

query2=select st\_code\_died,total\_death

from death,death\_rate,died\_in

where death\_state=state\_death AND death\_state=died\_state AND death\_rate\_per\_100000 > ‘q2’  
  
  
**3. Display the state region number where the cases last 7 days are greater then given number**

query3 =Select st\_region,count(st\_region) as number\_of\_states

From states\r\n”

Where st\_name IN ( Select sta\_name

From get\_sick

Where cases\_last\_7\_days>’ q3’)

group by st\_region;

**4. List the state names and total deaths \twhere the confirmed death number is greater then given number**

query4 = select death\_state,total\_death

from death

confirmed\_death >'q4'

**5. List the death number and state names**

query5=select st\_name,total\_death

states,died\_in,death

where st\_code=st\_code\_died AND state\_death=death\_state;

**6.List the state codes and state names where the case rate epr 100000 is more then 8000**

Select st\_code , st\_name

from states,case\_rate

where st\_name=case\_state AND case\_rate\_per\_100000>8000;

**7. List the state names and total death numbers where the probable case is greater then 100000**

query7=select death\_state,total\_death

from death

where death\_state IN ( select state\_name

from case\_states

where confirmed\_case >100000);

**8. List the state number of west regions where the death rate per 100000 is in given range**

query8=select count(st\_name) as state\_number

from states

st\_region ‘West’ AND st\_name IN(

select died\_state

from death\_rate

where death\_rate\_per\_100000   
 > 'minimum' AND death\_rate\_per\_100000 < 'maximum');

***References:***

[*https://www.youtube.com/watch?v=k1\_oA8v6Rc0&ab\_channel=ESDTutorials*](https://www.youtube.com/watch?v=k1_oA8v6Rc0&ab_channel=ESDTutorials)

[*https://www.youtube.com/watch?v=k1\_oA8v6Rc0&ab\_channel=ESDTutorials*](https://www.youtube.com/watch?v=k1_oA8v6Rc0&ab_channel=ESDTutorials)

[*https://www.youtube.com/watch?v=k1\_oA8v6Rc0*](https://www.youtube.com/watch?v=k1_oA8v6Rc0)

[*https://www.youtube.com/watch?v=LP7\_DlIe670&ab\_channel=1BestCsharpblog*](https://www.youtube.com/watch?v=LP7_DlIe670&ab_channel=1BestCsharpblog)

[*https://www.tutorialspoint.com/mysql-error-1452-cannot-add-or-update-a-child-row-a-foreign-key-constraint-fails#:~:text=The%20error%20comes%20when%20you,in%20in%20the%20other%20table.&text=%E2%80%9CForeign%20key%20relationships%20involve%20a,specified%20in%20the%20child%20table*](https://www.tutorialspoint.com/mysql-error-1452-cannot-add-or-update-a-child-row-a-foreign-key-constraint-fails#:~:text=The%20error%20comes%20when%20you,in%20in%20the%20other%20table.&text=%E2%80%9CForeign%20key%20relationships%20involve%20a,specified%20in%20the%20child%20table)*.*

[*https://www.youtube.com/watch?v=iE8tZ0hn2Ws&ab\_channel=AlexLee*](https://www.youtube.com/watch?v=iE8tZ0hn2Ws&ab_channel=AlexLee)

[*https://www.youtube.com/watch?v=k1\_oA8v6Rc0&list=PL0Eca86\_zC8\_MAgRcCTrmZafEEiFXTUje&index=3*](https://www.youtube.com/watch?v=k1_oA8v6Rc0&list=PL0Eca86_zC8_MAgRcCTrmZafEEiFXTUje&index=3)

[*https://stackoverflow.com/questions/14762904/incorrect-integer-value-for-column-id-at-row-1*](https://stackoverflow.com/questions/14762904/incorrect-integer-value-for-column-id-at-row-1)

[*https://www.tutorialspoint.com/mysql-error-1452-cannot-add-or-update-a-child-row-a-foreign-key-constraint-fails#:~:text=The%20error%20comes%20when%20you,in%20in%20the%20other%20table.&text=%E2%80%9CForeign%20key%20relationships%20involve%20a,specified%20in%20the%20child%20table*](https://www.tutorialspoint.com/mysql-error-1452-cannot-add-or-update-a-child-row-a-foreign-key-constraint-fails#:~:text=The%20error%20comes%20when%20you,in%20in%20the%20other%20table.&text=%E2%80%9CForeign%20key%20relationships%20involve%20a,specified%20in%20the%20child%20table)*.*

[*https://bugs.mysql.com/bug.php?id=90945*](https://bugs.mysql.com/bug.php?id=90945)

*Thank you.*