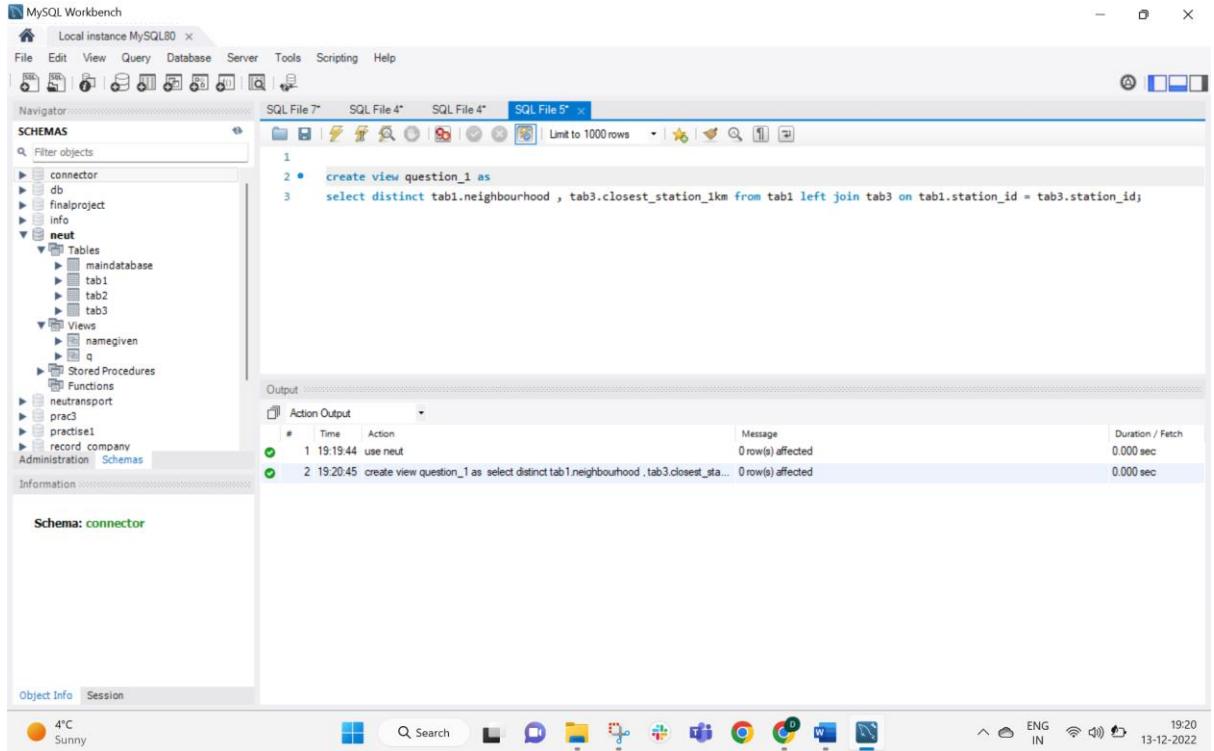


Assignment 4- Normalization

Topic Name- NEU Transportation System

Create Views Syntax

Q1. Which are the stations near to particular neighbourhood ?



The screenshot shows the MySQL Workbench interface. The left pane displays the Navigator with the 'neut' schema selected. Under 'Tables', there are entries for 'maindatabase', 'tab1', 'tab2', and 'tab3'. Under 'Views', there is a single entry for 'namegiven'. Under 'Stored Procedures', there is one entry for 'q'. The central pane contains a SQL editor with the following code:

```
1
2 • create view question_1 as
3   select distinct tab1.neighbourhood , tab3.closest_station_1km from tab1 left join tab3 on tab1.station_id = tab3.station_id;
```

The right pane shows the 'Output' window with the following log:

#	Action	Message	Duration / Fetch
1	19:19:44 use neut	0 row(s) affected	0.000 sec
2	19:20:45 create view question_1 as select distinct tab1.neighbourhood , tab3.closest_sta...	0 row(s) affected	0.000 sec

The bottom status bar shows the weather as '4°C Sunny' and the date/time as '13-12-2022 19:20'.

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- connector
- db
- finalproject
- info
- neut
- Tables
 - maindatabase
 - tab1
 - tab2
 - tab3
- Views
- namegivens
- q
- Stored Procedures
- Functions
- neuttransport
- prac3
- practise1
- record company

Administration Schemas

Information

Schema: connector

Object Info Session

4°C Sunny

SQL File 7* SQL File 4* SQL File 4* SQL File 5*

```

1
2  create view question_1 as
3  select distinct tab1.neighbourhood , tab3.closest_station_1km from tab1 left join tab3 on tab1.station_id = tab3.station_id
4 • select * from question_1

```

Result Grid | Filter Rows: Export: Wrap Cell Content: 1000 rows

neighbourhood	closest_station_1km
Back Bay	Copley Station
Jamaica Plain	Green Street Station
Dorchester	
Back Bay	Prudential Station
Jamaica Plain	Forest Hills Station
Jamaica Plain	Stony Brook Station
Back Bay	Hynes Convention Center

question_11 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	19:19:44	use neut	0 row(s) affected	0.000 sec
2	19:20:45	create view question_1 as select distinct tab1.neighbourhood , tab3.closest_st... 0 row(s) affected		0.000 sec
3	19:21:34	select * from question_1 LIMIT 0, 1000	81 row(s) returned	0.016 sec / 0.000 sec

19:21 13-12-2022

Q2. To find the nearest station , distance , neighbourhood from the street name MASSACHUSETTS AVE

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- connector
- db
- finalproject
- info
- neut
- Tables
 - maindatabase
 - tab1
 - tab2
 - tab3
- Views
- namegivens
- q
- Stored Procedures
- Functions
- neuttransport
- prac3
- practise1
- record company

Administration Schemas

Information

Schema: connector

Object Info Session

1°C Mostly clear

SQL File 7* SQL File 4* SQL File 4* SQL File 5*

```

1 • create view question_2 as
2  select neighbourhood , STREET , min(closest_station_distance) , closest_station_1km from neut.maindatabase where STREET = "MASSACHUSETTS AVE"
3 • select * from question_2

```

Result Grid | Filter Rows: Export: Wrap Cell Content: 1000 rows

neighbourhood	STREET	min(closest_station_distance)	closest_station_1km
Jamaica Plain	MASSACHUSETTS AVE	0.106319184	Green Street Station

question_2_2 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	19:19:44	use neut	0 row(s) affected	0.000 sec
2	19:20:45	create view question_2 as select neighbourhood , STREET , min(closest_stati... 0 row(s) affected		0.000 sec
3	19:21:34	select * from question_2 LIMIT 0, 1000	81 row(s) returned	0.016 sec / 0.000 sec
4	19:26:12	create view question_2 as select neighbourhood , STREET , min(closest_stati... Error Code: 1054. Unknown column 'closest_station_1km' in field list'		0.000 sec
5	19:26:24	create view question_2 as select neighbourhood , STREET , min(closest_stati... 0 row(s) affected		0.000 sec
6	19:26:50	select * from question_2 LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

19:26 13-12-2022

Q3 . To count the number of street in each neighbourhood

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

neut

Tables

Views

Stored Procedures

Functions

neuttransport

Administration Schemas

Information

No object selected

Object Info Session

Result Grid

SQL File 7* SQL File 4* SQL File 4* SQL File 5*

```

1 • create view question_3 as
2 select distinct neighbourhood , count(STREET) from neut.maindatabase group by neighbourhood order by STREET;
3 • select * from question_3

```

Result Grid | Filter Rows: Export: Wrap Cell Content:

neighbourhood	count(STREET)
Roxbury	12
Hyde Park	4
North End	8
Roslindale	7
South Boston Waterfront	2
Charlestown	4
West End	3
Back Bay	21

question_3_1 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	19:30:32	use neut	0 row(s) affected	0.000 sec
2	19:30:42	create view question_3 as select distinct neighbourhood , count(STREET) from neut.maindatabase group by neighbourhood order by STREET;	Error Code: 1050. Table 'question_3' already exists	0.000 sec
3	19:30:55	create view question_3 as select distinct neighbourhood , count(STREET) from neut.maindatabase group by neighbourhood order by STREET;	0 row(s) affected	0.000 sec
4	19:31:11	select * from question_3 LIMIT 0, 1000	22 row(s) returned	0.015 sec / 0.000 sec

1°C Mostly clear

ENG IN 13-12-2022 19:31

Q4 To find the street, neighbourhood name where reporting crime counts are more than 800

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

neut

Tables

Views

Stored Procedures

Administration Schemas

Information

No object selected

Object Info Session

Result Grid

SQL File 7* SQL File 4* SQL File 4* SQL File 5*

```

1 • create view question_4 as
2 select distinct neighbourhood , STREET , REPORTING_AREA from neut.maindatabase where REPORTING_AREA
3 group by STREET , REPORTING_AREA ORDER BY STREET;
4 • select * from question_4

```

Result Grid | Filter Rows: Export: Wrap Cell Content:

neighbourhood	STREET	REPORTING_AREA
South End	BRIGHTON AVE	802
South End	DORCHESTER AVE	817
Back Bay	FIDELIS WAY	938
Allston	HEATH ST	906
Jamaica Plain	RIVER ST	951
Brighton	WASHINGTON ST	933

question_4_1 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	19:34:49	use neut	0 row(s) affected	0.000 sec
2	19:34:56	create view question_4 as select distinct neighbourhood , STREET , REPORTING_AREA from neut.maindatabase where REPORTING_AREA group by STREET , REPORTING_AREA ORDER BY STREET;	0 row(s) affected	0.015 sec
3	19:35:14	select * from question_4 LIMIT 0, 1000	6 row(s) returned	0.000 sec / 0.000 sec

1°C Mostly clear

ENG IN 13-12-2022 19:35

Q5. What is the count of reporting crime of a particular neighbourhood?

The screenshot shows the MySQL Workbench interface with the following details:

- Schemas:** Local instance MySQL80
- Tables:** neut (maindatabase, tab1, tab2, tab3)
- Views:** namegiven, q, question_1, question_2, question_3, question_4, question_5, question_6, question_7
- SQL Editor:**

```

1 • create view question_5 as
2 select tab1.neighbourhood , tab2.REPORTING_AREA from tab1 inner join tab2 on tab1.STREET = tab2.STREET group by neighbourhood;
3 • select * from question_5;
```
- Result Grid:**

neighbourhood	REPORTING_AREA
Back Bay	283
Jamaica Plain	172
Dorchester	172
South End	102
Beacon Hill	102
Fenway	282
Roxbury	444
North End	646
- Output:**

#	Time	Action	Message	Duration / Fetch
1	19:34:49	use neut	0 row(s) affected	0.000 sec
2	19:34:56	create view question_4 as select distinct neighbourhood , STREET , REPORT... 0 row(s) affected		0.015 sec
3	19:35:14	select * from question_4 LIMIT 0, 1000	6 row(s) returned	0.000 sec / 0.000 sec
4	19:37:33	create view question_5 as select tab1.neighbourhood ,tab2.REPORTING_A... 0 row(s) affected		0.000 sec
5	19:37:46	select * from question_5 LIMIT 0, 1000	22 row(s) returned	0.015 sec / 0.000 sec

Q6 To display street name where Reporting crime count more than the avg reporting count

The screenshot shows the MySQL Workbench interface with the following details:

- Schemas:** Local instance MySQL80
- Tables:** neut (maindatabase, tab1, tab2, tab3)
- Views:** namegiven, q, question_1, question_2, question_3, question_4, question_5, question_6, question_7
- SQL Editor:**

```

1 • create view question_6 as
2 select STREET , REPORTING_AREA from neut.maindatabase where REPORTING_AREA > (select avg(REPORTING_AREA) from neut.maindatabase);
3 • select * from question_6;
```
- Result Grid:**

STREET	REPORTING_AREA
WASHINGTON ST	450
HUNTINGTON AVE	600
WASHINGTON ST	562
HUNTINGTON AVE	594
RAFON ST	517
- Output:**

#	Time	Action	Message	Duration / Fetch
1	19:34:49	use neut	0 row(s) affected	0.000 sec
2	19:34:56	create view question_4 as select distinct neighbourhood , STREET , REPORT... 0 row(s) affected		0.015 sec
3	19:35:14	select * from question_4 LIMIT 0, 1000	6 row(s) returned	0.000 sec / 0.000 sec
4	19:37:33	create view question_5 as select tab1.neighbourhood ,tab2.REPORTING_A... 0 row(s) affected		0.000 sec
5	19:37:46	select * from question_5 LIMIT 0, 1000	22 row(s) returned	0.015 sec / 0.000 sec
6	19:40:02	create view question_6 as select STREET , REPORTING_AREA from neut.ma... 0 row(s) affected		0.000 sec
7	19:41:13	select * from question_6 LIMIT 0, 1000	113 row(s) returned	0.000 sec / 0.000 sec

Q7. To select the station and neighbourhood name which has more than one train connection

The screenshot shows the MySQL Workbench interface with the following details:

- Navigator:** Shows the database schema with the **neut** schema expanded, containing tables **maindatabase**, **tab1**, **tab2**, **tab3**, and views **namegiven**, **q**, **question_1**, **question_2**, **question_3**, **question_5**, and **question_3**.
- SQL Editor:** Contains the following SQL code:

```
1 • create view question_7 as
2 select neighbourhood , station, line__001 from maindatabase where station = "Park Street Station";
3 • select * from question_7;
```
- Result Grid:** Displays the output of the query, showing four rows:

neighbourhood	station	line__001
Beacon Hill	Park Street Station	red
Downtown	Park Street Station	orange
Beacon Hill	Park Street Static	Park Street Station
Downtown	Park Street Station	red
- Output:** Shows the session history with 9 entries, all related to the creation and execution of the view **question_7**.
- System Bar:** Includes system icons for weather (1°C), search, taskbar, and system status.

Q8 To select the street name and station who has committed the offence of Verbal Dispute

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- connector
- db
- finalproject
- info
- neut
- Tables
- maindatabase
- tab1
- tab2
- tab3

Views

- namegiven
- q
- question_1
- question_2
- question_3
- question_4
- question_5
- question_6

Administration Schemas

Information

No object selected

Action Output

#	Time	Action	Message	Duration / Fetch
1	19:46:27	use neut	0 row(s) affected	0.016 sec
2	19:49:39	create view question_8 as select tab2.STREET ,tab3.station,tab2.OFFENSE_DESCRIPTION from tab2 inner join tab3 on tab2.Station_ID = tab3.Station_ID where tab2.OFFENSE_DESCRIPTION = "VERBAL DISPUTE";	0 row(s) affected	0.016 sec
3	19:49:55	select * from question_8 LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec

Result Grid

Filter Rows: Export: Wrap Cell Content: 1000 rows

STREET	station	OFFENSE_DESCRIPTION
MASSACHUSETTS AVE	Green Street Station	VERBAL DISPUTE
HUNTINGTON AVE	Forest Hills Station	VERBAL DISPUTE
MASSACHUSETTS AVE	Charles/MGH Station	VERBAL DISPUTE
HARVARD ST	Stony Brook Station	VERBAL DISPUTE
RIVER ST	Green Street Station	VERBAL DISPUTE
RIFFHILL AVE	Hawmarket Station	VERBAL DISPUTE

question_8_1 x

Object Info Session

1°C Mostly clear

Q Search

ENG IN

19:50 13-12-2022

Q9 To select the neighbourhood, street and reported crime area which has the most minimum reported crime

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- connector
- db
- finalproject
- info
- neut
- Tables
- maindatabase
- tab1
- tab2
- tab3

Views

- namegiven
- q
- question_1
- question_2
- question_3
- question_4
- question_5
- question_6

Administration Schemas

Information

No object selected

Action Output

#	Time	Action	Message	Duration / Fetch
1	19:46:27	use neut	0 row(s) affected	0.016 sec
2	19:49:39	create view question_9 as select tab1.neighbourhood , tab1.STREET, min(tab2.REPORTING_AREA) as Minimum_Reported_Crime from tab1 left join tab2 on tab1.STREET = tab2.STREET;	0 row(s) affected	0.016 sec
3	19:49:55	select * from question_9	8 row(s) returned	0.000 sec / 0.000 sec
4	19:52:32	create view question_9 as select tab1.neighbourhood , tab1.STREET,min(tab2.REPORTING_AREA) as Minimum_Reported_Crime from tab1 left join tab2 on tab1.STREET = tab2.STREET;	0 row(s) affected	0.000 sec
5	19:52:49	select * from question_9 LIMIT 0, 1000	1 row(s) returned	0.016 sec / 0.000 sec

Result Grid

Filter Rows: Export: Wrap Cell Content: 1000 rows

neighbourhood	STREET	Minimum_Reported_Crime
Back Bay	HUNTINGTON AVE	23

question_9_2 x

Object Info Session

1°C Mostly clear

Q Search

ENG IN

19:52 13-12-2022

Q10 To find the neighbourhood name and street name who has reported crime less than 100

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- connector
- db
- finalproject
- info
- neut
- Tables
- maindatabase
- tab1
- tab2
- tab3
- Views
- namegiven
- q
- question_1
- question_2
- question_3
- question_4
- question_5
- question_6
- question_10
- question_10_3

SQL File 7* SQL File 4* SQL File 5*

```

1 create view question_10 as
2 select distinct neighbourhood,STREET from tab1 where exists
3 ( select REPORTING_AREA ,STREET from tab2 where tab1.STREET = tab2.STREET AND REPORTING_AREA < 100 );
4 • select * from question_10

```

Result Grid | Filter Rows: Export: Wrap Cell Content: 1000 rows

neighbourhood	STREET
Dorchester	CAMBRIDGE ST
Dorchester	BOWDOIN ST
Mission Hill	CAMBRIDGE ST
Fenway	FANEUIL HALL MARKETPLACE
Hyde Park	CAMBRIDGE ST
Beacon Hill	BENNINGTON ST
Hyde Park	BENNINGTON ST

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	19:46:27	use neut;	0 row(s) affected	0.016 sec
2	19:49:39	create view question_8 as select tab2.STREET ,tab3.station,tab2.OFFENSE_...	0 row(s) affected	0.016 sec
3	19:49:55	select * from question_8 LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
4	19:52:32	create view question_9 as select tab1.neighbourhood ,tab1.STREET ,min(tab...	0 row(s) affected	0.000 sec
5	19:52:49	select * from question_9 LIMIT 0, 1000	1 row(s) returned	0.016 sec / 0.000 sec
6	19:56:50	create view question_10 as select distinct neighbourhood,STREET from tab1 ...	0 row(s) affected	0.000 sec
7	19:57:11	select * from question_10 LIMIT 0, 1000	10 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

1°C Mostly clear ENG IN 19:57 13-12-2022

Q11 To find the Neighbourhood name and street name and who has reported the offense of property lost

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- connector
- db
- finalproject
- info
- neut
- Tables
- maindatabase
- tab1
- tab2
- tab3
- Views
- namegiven
- q
- question_1
- question_2
- question_3
- question_4
- question_5
- question_6
- question_11
- question_11_4

SQL File 7* SQL File 4* SQL File 5*

```

1 create view question_11 as
2 select distinct tab1.neighbourhood , tab1.STREET ,tab2.OFFENSE_DESCRIPTION from tab1 inner join tab2 on tab1.STREET = tab2.STREET
3 where OFFENSE_DESCRIPTION = "PROPERTY - LOST";
4 • select * from question_11

```

Result Grid | Filter Rows: Export: Wrap Cell Content: 1000 rows

neighbourhood	STREET	OFFENSE_DESCRIPTION
Back Bay	HUNTINGTON AVE	PROPERTY - LOST
Jamaica Plain	MASSACHUSETTS AVE	PROPERTY - LOST
Dorchester	MASSACHUSETTS AVE	PROPERTY - LOST
Back Bay	WASHINGTON ST	PROPERTY - LOST
Jamaica Plain	HUNTINGTON AVE	PROPERTY - LOST
South End	TREMONT ST	PROPERTY - LOST
Beacon Hill	TREMONT ST	PROPERTY - LOST
Fenway	WASHINGTON ST	PROPERTY - LOST
Beacon Hill	BOYLSTON ST	PROPERTY - LOST

Output

Action Output

#	Time	Action	Message	Duration / Fetch
3	19:49:55	select * from question_8 LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
4	19:52:32	create view question_9 as select tab1.neighbourhood ,tab1.STREET ,min(tab...	0 row(s) affected	0.000 sec
5	19:52:49	select * from question_9 LIMIT 0, 1000	1 row(s) returned	0.016 sec / 0.000 sec
6	19:56:50	create view question_10 as select distinct neighbourhood,STREET from tab1 ...	0 row(s) affected	0.000 sec
7	19:57:11	select * from question_10 LIMIT 0, 1000	10 row(s) returned	0.000 sec / 0.000 sec
8	19:59:38	create view question_11 as select distinct tab1.neighbourhood ,tab1.STREE... Error Code: 1054. Unknown column tab2.OFFENSE_DESCRIPTION in field...	0.000 sec	
9	20:00:38	create view question_11 as select distinct tab1.neighbourhood ,tab1.STREE... 0 row(s) affected	0.000 sec	
10	20:00:57	select * from question_11 LIMIT 0, 1000	61 row(s) returned	0.016 sec / 0.000 sec

Object Info Session

1°C Mostly clear ENG IN 20:01 13-12-2022

Q12 . Check for the closest station from 1,2,3km using case expression

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

neut

Tables

maindatabase tab1 tab2 tab3

Views

namegiven q question_1 question_2 question_3 question_4 question_5 question_6

Administration Schemas

No object selected

Object Info Session

1°C Mostly clear

SQL File 7* SQL File 4* SQL File 5*

```

1 create view question_12 as
2 select distinct Station , closest_station_1km , closest_station_2km , closest_station_3km
3 from neut.maindatabase
4 order by
5 (case
6 when closest_station_1km is null then closest_station_2km
7 when closest_station_2km is null then closest_station_3km
8 else closest_station_1km
9 END);
10 • select * from question_12;

```

Result Grid | Filter Rows: Export: Wrap Cell Content: ⌂

Station	closest_station_1km	closest_station_2km	closest_station_3km
Forest Hills Station		Boston College Station	Boston College Station
Boston College Station		Shawmut Station	Shawmut Station
Shawmut Station		South Street Station	South Street Station
South Street Station		Harvard Avenue Station	Harvard Avenue Station
Harvard Avenue Station		Broadway Station	Broadway Station
Broadway Station		Forest Hills Station	Forest Hills Station
Forest Hills Station			

question_12 5 x

Action Output

#	Time	Action	Message	Duration / Fetch
9	20:00:38	create view question_11 as select distinct tab1.neighbourhood ,tab1.STREE...	0 row(s) affected	0.000 sec
10	20:00:57	select * from question_11 LIMIT 0, 1000	61 row(s) returned	0.016 sec / 0.000 sec
11	20:04:19	create view question_12 as select distinct Station , closest_station_1km , clo...	0 row(s) affected	0.016 sec
12	20:04:42	select * from question_12 LIMIT 0, 1000	75 row(s) returned	0.000 sec / 0.000 sec

ENG IN 20:05 13-12-2022

Q13 To find the recent 5 offense, reported crime of the streets

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

neut

Tables

maindatabase tab1 tab2 tab3

Views

namegiven q question_1 question_2 question_3 question_4 question_5 question_6

Administration Schemas

No object selected

Object Info Session

0°C Mostly clear

SQL File 7* SQL File 4* SQL File 5*

```

1 create view question_13 as
2 Select concat(STREET, REPORTING_AREA , OFFENSE_DESCRIPTION) AS RESULT FROM neut.maindatabase limit 5;
3 • select * from question_13

```

Result Grid | Filter Rows: Export: Wrap Cell Content: ⌂

RESULT
HUNTINGTON AVE146LARCENY SHOPLIFTING
MASSACHUSETTS AVE185VERBAL DISPUTE
MASSACHUSETTS AVE185LARCENY ALL OTHERS
WASHINGTON ST450HARASSMENT
HUNTINGTON AVE600ASSAULT - AGGRAVATED

question_13 6 x

Action Output

#	Time	Action	Message	Duration / Fetch
11	20:04:19	create view question_12 as select distinct Station , closest_station_1km , clo...	0 row(s) affected	0.016 sec
12	20:04:42	select * from question_12 LIMIT 0, 1000	75 row(s) returned	0.000 sec / 0.000 sec
13	20:07:19	create view question_13 as Select concat(STREET, REPORTING_AREA , ...	0 row(s) affected	0.000 sec
14	20:07:39	select * from question_13 LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000 sec

ENG IN 20:07 13-12-2022

Q14 To find the station, the train line of the street using “USING Clause”

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- connector
- db
- finalproject
- info
- neut
- Tables
- maindatabase
- tab1
- tab2
- tab3
- Views
- namegiven
- q
- question_1
- question_2
- question_3
- question_4
- question_5
- question_6

Administration Schemas

Information

No object selected

Object Info Session

0°C Mostly clear

SQL File 7* SQL File 4* SQL File 4* SQL File 5*

Limit to 1000 rows

```

1 create view question_14 as
2 SELECT DISTINCT e.STREET , d.station , d.line_001 from tab1 e JOIN tab3 d
3 using(Station_ID);
4 select * from question_14

```

Result Grid | Filter Rows: Export: Wrap Cell Content:

STREET	station	line_001
HUNTINGTON AVE	Copley Station	green
MASSACHUSETTS AVE	Green Street Station	orange
MASSACHUSETTS AVE	Shawmut Station	red
WASHINGTON ST	Prudential Station	green
HUNTINGTON AVE	Green Street Station	orange
HUNTINGTON AVE	Forest Hills Station	orange
HUNTINGTON AVE	Stony Brook Station	orange
WASHINGTON ST	Hynes Convention Center	green
TREMONT ST	Back Bay Station	orange
TREMONT ST	Bowdoin Station	blue

Result Grid Form Editor Field Types Read Only

question_14 8 x

Action Output

#	Time	Action	Message	Duration / Fetch
11	20:04:19	create view question_12 as select distinct Station , closest_station_1km , clo...	0 row(s) affected	0.016 sec
12	20:04:42	select * from question_12 LIMIT 0, 1000	75 row(s) returned	0.000 sec / 0.000 sec
13	20:07:19	create view question_13 as Select concat(STREET, REPORTING_AREA, ...)	0 row(s) affected	0.000 sec
14	20:07:39	select * from question_13 LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000 sec
15	20:09:39	create view question_14 as SELECT DISTINCT e.STREET , d.station , d.line...	0 row(s) affected	0.000 sec
16	20:09:57	select * from question_14 LIMIT 0, 1000	199 row(s) returned	0.000 sec / 0.000 sec

ENG IN 2010 13-12-2022 1

Q15 To find the closest station, distance from a particular neighbourhood and street.

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- connector
- db
- finalproject
- info
- neut
- Tables
- maindatabase
- tab1
- tab2
- tab3
- Views
- namegiven
- q
- question_1
- question_2
- question_3
- question_4
- question_5
- question_6

Administration Schemas

Information

No object selected

Object Info Session

0°C Mostly clear

SQL File 7* SQL File 4* SQL File 4* SQL File 5*

Limit to 1000 rows

```

1 create view question_15 as
2 select distinct tab1.neighbourhood,tab1.STREET , tab3.closest_station_distance , tab3.closest_station_1km
3 from tab1 inner join tab3 on tab1.ID = tab3.ID;
4 select * from question_15;

```

Result Grid | Filter Rows: Export: Wrap Cell Content:

neighbourhood	STREET	closest_station_distance	closest_station_1km
Back Bay	HUNTINGTON AVE	0.388674513	Copley Station
Jamaica Plain	MASSACHUSETTS AVE	0.756237262	Green Street Station
Dorchester	MASSACHUSETTS AVE	1.576817878	
Back Bay	WASHINGTON ST	0.091817796	Prudential Station
Jamaica Plain	HUNTINGTON AVE	0.151704646	Green Street Station
Jamaica Plain	WASHINGTON AVE	0.378969426	Forest Hills Station
Jamaica Plain	HUNTINGTON AVE	0.471992524	Forest Hills Station
Jamaica Plain	WASHINGTON AVE	0.68090611	Stony Brook Station
Jamaica Plain	WASHINGTON CT	0.417116007	Hynes Convention Center

Result Grid Form Editor Field Types Read Only

question_15 8 x

Action Output

#	Time	Action	Message	Duration / Fetch
12	20:04:42	select * from question_12 LIMIT 0, 1000	75 row(s) returned	0.000 sec / 0.000 sec
13	20:07:19	create view question_13 as Select concat(STREET, REPORTING_AREA, ...)	0 row(s) affected	0.000 sec
14	20:07:39	select * from question_13 LIMIT 0, 1000	5 row(s) returned	0.015 sec / 0.000 sec
15	20:09:39	create view question_14 as SELECT DISTINCT e.STREET , d.station , d.line...	0 row(s) affected	0.000 sec
16	20:09:57	select * from question_14 LIMIT 0, 1000	199 row(s) returned	0.000 sec / 0.000 sec
17	20:14:00	create view question_15 as select distinct tab1.neighbourhood,tab1.STREET...	0 row(s) affected	0.015 sec
18	20:14:24	select * from question_15 LIMIT 0, 1000	246 row(s) returned	0.016 sec / 0.000 sec

ENG IN 2014 13-12-2022 1

Q16 . We have created a view and given the name (namegiven)

MySQL Workbench

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- connector
- db
- finalproject
- info
- neut**
- Tables
- maindatabase
- tab1
- tab2
- tab3
- Views
- namenaviven
- q
- question_1
- question_2
- question_3
- question_4
- question_5
- question_6

Administration Schemas

No object selected

SQL File 7* SQL File 4* SQL File 5*

```

1 create view question_16 as
2 SELECT neighbourhood , street , closest_station_distance, REPORTING_AREA,OFFENSE_DESCRIPTION,station from neut.maindatabase;
3 select * from question_16;
```

Result Grid | Filter Rows: Export: Wrap Cell Content:

neighbourhood	street	closest_station_distance	REPORTING_AREA	OFFENSE_DESCRIPTION	station
Back Bay	HUNTINGTON AVE	0.388674513	146	LARCENY SHOPLIFTING	Copley Station
Jamaica Plain	MASSACHUSETTS AVE	0.756237262	185	VERBAL DISPUTE	Green Street Station
Dorchester	MASSACHUSETTS AVE	1.576817878	185	LARCENY ALL OTHERS	Shawmut Station
Back Bay	WASHINGTON ST	0.091817796	450	HARASSMENT	Prudential Station
Jamaica Plain	HUNTINGTON AVE	0.151704646	600	ASSAULT - AGGRAVATED	Green Street Station
Jamaica Plain	HUNTINGTON AVE	0.378969426	600	ASSAULT SIMPLE - BATTERY	Forest Hills Station
Jamaica Plain	HUNTINGTON AVE	0.471992524	600	DISORDERLY CONDUCT	Forest Hills Station
Jamaica Plain	HUNTINGTON AVE	0.68090611	600	TRESPASSING	Stony Brook Station
Back Bay	WASHINGTON ST	0.412716007	562	LARCENY THEFT FROM MV - NON-ACCESSORY	Hynes Convention Center
Jamaica Plain	HUNTINGTON AVE	0.65981674	594	VERBAL DISPUTE	Forest Hills Station
South End	TREMONT ST	0.1420921	111	ASSAULT - AGGRAVATED - BATTERY	Back Bay Station
Beacon Hill	TREMONT ST	0.171207855	122	M/V - LEAVING SCENE - PROPERTY DAMAGE	Bowdon Station

Result Grid Form Editor Field Types

question_16 9 x

Action Output

#	Time	Action	Message	Duration / Fetch
17	20:14:00	create view question_15 as select distinct tab1.neighbourhood,tab1.STREET...	0 row(s) affected	0.015 sec
18	20:14:24	select * from question_15 LIMIT 0, 1000	246 row(s) returned	0.016 sec / 0.000 sec
19	20:18:11	create view question_16 as SELECT neighbourhood , street , closest_stati...	Error Code: 1054. Unknown column 'neighbourhood' in field list'	0.000 sec
20	20:18:19	create view question_16 as SELECT neighbourhood , street , closest_stati...	0 row(s) affected	0.000 sec
21	20:18:48	select * from question_16 LIMIT 0, 1000	245 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

0°C Mostly clear 20:18 13-12-2022

Q17 To find street name, neighbourhood and offense description on the basis on reporting crime

MySQL Workbench

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- connector
- db
- finalproject
- info
- neut**
- Tables
- maindatabase
- tab1
- tab2
- tab3
- Views
- namenaviven
- q
- question_1
- question_2
- question_3
- question_4
- question_5
- question_6

Administration Schemas

No object selected

SQL File 7* SQL File 4* SQL File 5*

```

1 create view question_17 as
2 select distinct tab1.neighbourhood , tab1.STREET , tab2.REPORTING_AREA , tab2.OFFENSE_DESCRIPTION
3 from tab1 inner join tab2 on tab1.STREET = tab2.STREET
4 where REPORTING_AREA > 700
5 group by STREET , REPORTING_AREA ORDER BY STREET;
6 • select * from question_17;
```

Result Grid | Filter Rows: Export: Wrap Cell Content:

neighbourhood	STREET	REPORTING_AREA	OFFENSE_DESCRIPTION
Jamaica Plain	BEACON ST	749	INVESTIGATE PROPERTY
Allston	BRIGHTON AVE	796	LARCENY ALL OTHERS
Allston	BRIGHTON AVE	800	LARCENY THEFT FROM BUILDING
Allston	BRIGHTON AVE	802	VANDALISM
Dorchester	CAMBRIDGE ST	795	VAL - VIOLATION OF AUTO LAW - OTHER
Downtown	COMMONWEALTH AVE	786	INVESTIGATE PERSON
Downtown	COMMONWEALTH AVE	788	TOWED MOTOR VEHICLE
Downtown	COMMONWEALTH AVE	793	TOWED MOTOR VEHICLE
Downtown	COMMONWEALTH AVE	794	LANDLORD - TENANT SERVICE

Result Grid Form Editor Field Types

question_17 10 x

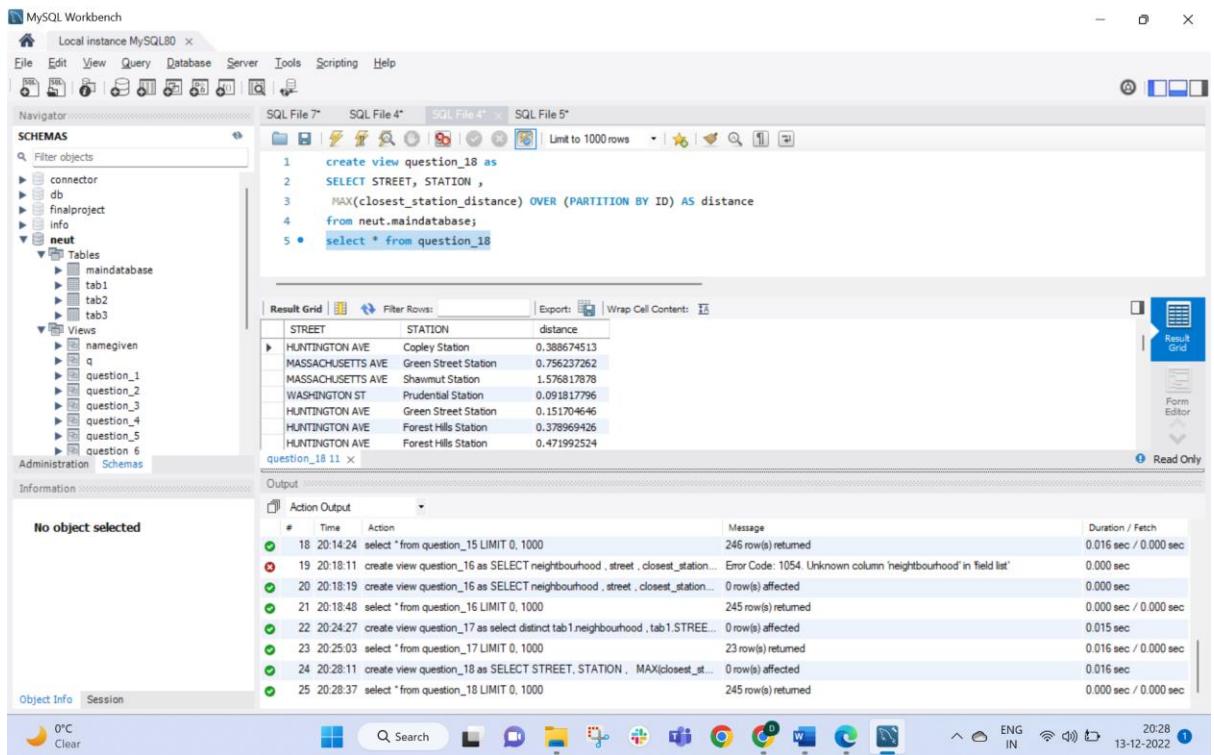
Action Output

#	Time	Action	Message	Duration / Fetch
18	20:14:24	select * from question_15 LIMIT 0, 1000	246 row(s) returned	0.016 sec / 0.000 sec
19	20:18:11	create view question_16 as SELECT neighbourhood , street , closest_stati...	Error Code: 1054. Unknown column 'neighbourhood' in field list'	0.000 sec
20	20:18:19	create view question_16 as SELECT neighbourhood , street , closest_stati...	0 row(s) affected	0.000 sec
21	20:18:48	select * from question_16 LIMIT 0, 1000	245 row(s) returned	0.000 sec / 0.000 sec
22	20:24:27	create view question_17 as select distinct tab1.neighbourhood , tab1.STREE...	0 row(s) affected	0.015 sec
23	20:25:03	select * from question_17 LIMIT 0, 1000	23 row(s) returned	0.016 sec / 0.000 sec

Object Info Session

0°C Mostly clear 20:25 13-12-2022

Q18. To find the station which is farest from the street along with the distance using “PARTITION BY” clause



```
create view question_18 as
SELECT STREET, STATION ,
       MAX(closest_station_distance) OVER (PARTITION BY ID) AS distance
  from neut.maindatabase;
select * from question_18
```

STREET	STATION	distance
HUNTINGTON AVE	Copley Station	0.388674513
MASSACHUSETTS AVE	Green Street Station	0.756237262
MASSACHUSETTS AVE	Shawmut Station	1.576817978
WASHINGTON ST	Prudential Station	0.091817796
HUNTINGTON AVE	Green Street Station	0.151704646
HUNTINGTON AVE	Forest Hills Station	0.378969426
HUNTINGTON AVE	Forest Hills Station	0.471992524

Q19. To find the Neighbourhood name and street name and who has reported the offense of TRESPASSING

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- connector
- db
- finalproject
- info
- neut**
- Tables
- maindatabase
- tab1
- tab2
- tab3
- Views
- namegivens
- q
- question_1
- question_2
- question_3
- question_4
- question_5
- question_6

Administration Schemas

Information

Table: tab2

Columns:

STREETID	int
STREET	text
REPORTING_AREA	int
OFFENSE_DESCRIPTION	text
Station_ID	int

Action Output

#	Time	Action	Message	Duration / Fetch	
23	20:25:03	select * from question_17 LIMIT 0, 1000	23 row(s) returned	0.016 sec / 0.000 sec	
24	20:28:11	create view question_18 as SELECT STREET, STATION , MAX(closest_st...	0 row(s) affected	0.016 sec	
25	20:28:37	select * from question_18 LIMIT 0, 1000	245 row(s) returned	0.000 sec / 0.000 sec	
26	20:32:22	create procedure top_STREET() begin select STREET , line__001 from n...	0 row(s) affected	0.016 sec	
27	20:32:42	select * from question_19 LIMIT 0, 1000	Error Code: 1146. Table 'neut.question_19' doesn't exist	0.000 sec	
28	20:33:47	select * from question_19 LIMIT 0, 1000	Error Code: 1146. Table 'neut.question_19' doesn't exist	0.000 sec	
29	20:41:30	create view question_19 as select tab2.STREET,tab3.station,tab2.OFFENSE_DESCRIPTION	0 row(s) affected	0.016 sec	
30	20:41:47	select * from question_19 LIMIT 0, 1000	FROM tab2 inner join tab3 on tab2.Station_ID = tab3.Station_ID	0 row(s) affected	0.000 sec
31	20:42:02	select * from question_19 LIMIT 0, 1000	where tab2.OFFENSE_DESCRIPTION = "TRESPASSING"	0.000 sec / 0.000 sec	

Result Grid

STREET station OFFENSE_DESCRIPTION

HUNTINGTON AVE	Stony Brook Station	TRESPASSING
BOYLSTON ST	Bowdoin Station	TRESPASSING
GERARD ST	Andrew Station	TRESPASSING

Output

question_19 12 x

Object Info Session

0°C Clear

20:42 13-12-2022

Q20 To find the neighbourhood's name and street name who has reported crime less than 300

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- connector
- db
- finalproject
- info
- neut**
- Tables
- maindatabase
- tab1
- tab2
- tab3
- Views
- namegivens
- q
- question_1
- question_2
- question_3
- question_4
- question_5
- question_6

Administration Schemas

Information

Table: tab2

Columns:

STREETID	int
STREET	text
REPORTING_AREA	int
OFFENSE_DESCRIPTION	text
Station_ID	int

Action Output

#	Time	Action	Message	Duration / Fetch
28	20:33:47	select * from question_19 LIMIT 0, 1000	Error Code: 1146. Table 'neut.question_19' doesn't exist	0.000 sec
29	20:41:30	create view question_19 as select tab2.STREET,tab3.station,tab2.OFFEN...	0 row(s) affected	0.016 sec
30	20:41:47	select * from question_19 LIMIT 0, 1000	Error Code: 1146. Table 'neut.question_19' doesn't exist	0.000 sec
31	20:42:02	select * from question_19 LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
32	20:48:43	create view question_20 as select distinct neighbourhood , STREET from t...	Error Code: 1054. Unknown column 'tab2.STRRET' in 'where clause'	0.016 sec
33	20:49:06	create view question_20 as select distinct neighbourhood , STREET from t...	0 row(s) affected	0.016 sec
34	20:49:40	select * from question_20 LIMIT 0, 1000	114 row(s) returned	0.016 sec / 0.000 sec

Result Grid

neighbourhood STREET

Back Bay	HUNTINGTON AVE
Jamaica Plain	MASSACHUSETTS AVE
Dorchester	MASSACHUSETTS AVE
Back Bay	WASHINGTON ST
Jamaica Plain	HUNTINGTON AVE
South End	TREMONT ST
Beacon Hill	TREMONT ST
Jamaica Plain	BEACON ST
Fenway	WASHINGTON ST

Output

question_20 13 x

Object Info Session

0°C Clear

20:49 13-12-2022