

ACCESS CONTROL

USER CREATION

```
create user 'gayathri' identified by 'welcome123';
create user 'keerthana' identified by 'welcome123';
create user 'deepasha' identified by 'welcome123';
```

```
GRANT SELECT,INSERT,UPDATE,DELETE ON group_project_225.cdc_covid_data_local TO 'gayathri' WITH
GRANT OPTION;
GRANT SELECT,INSERT,UPDATE,DELETE ON group_project_225.cdc_covid_data_without_partition TO
'gayathri' WITH GRANT OPTION;
GRANT SELECT,INSERT ON group_project_225.cdc_covid_data_local TO 'keerthana' WITH GRANT
OPTION;
GRANT SELECT,INSERT ON group_project_225.cdc_covid_data_without_partition TO 'keerthana' WITH
GRANT OPTION;
GRANT SELECT ON group_project_225.cdc_covid_data_local TO 'deepasha' WITH GRANT OPTION;
GRANT SELECT ON group_project_225.cdc_covid_data_without_partition TO 'deepasha' WITH GRANT
OPTION;
```

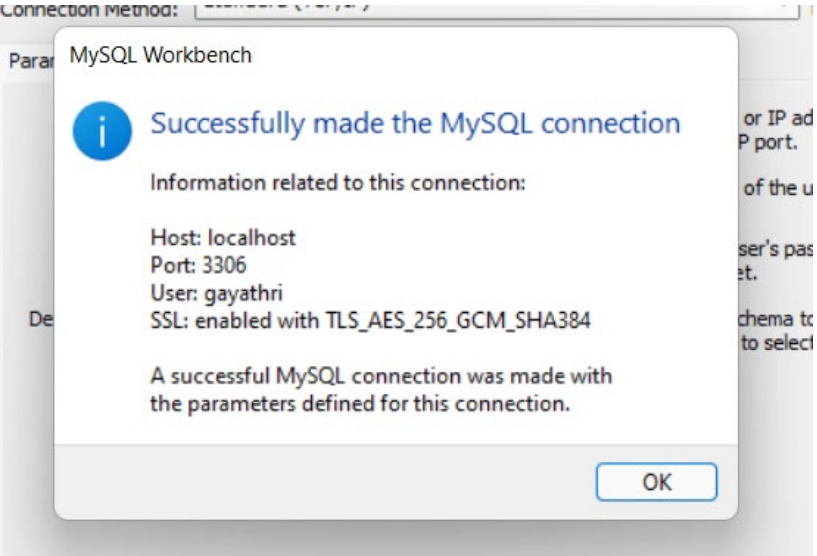
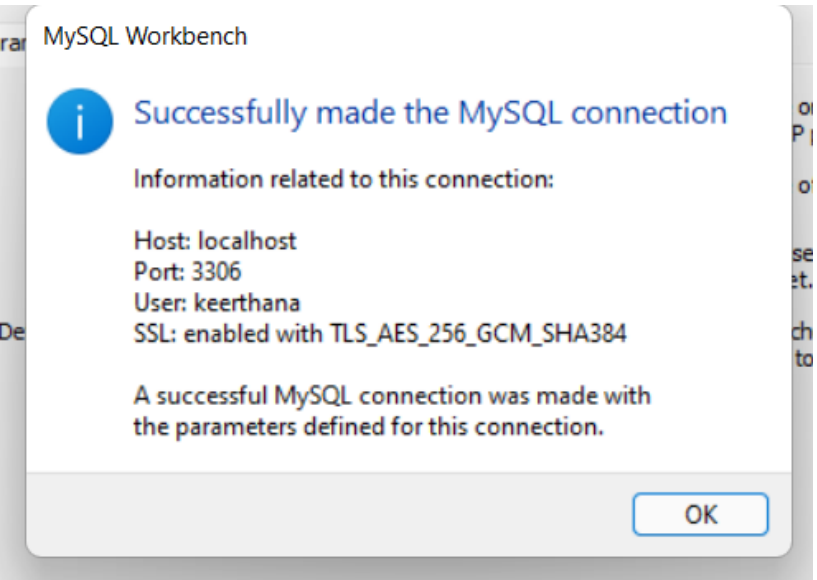
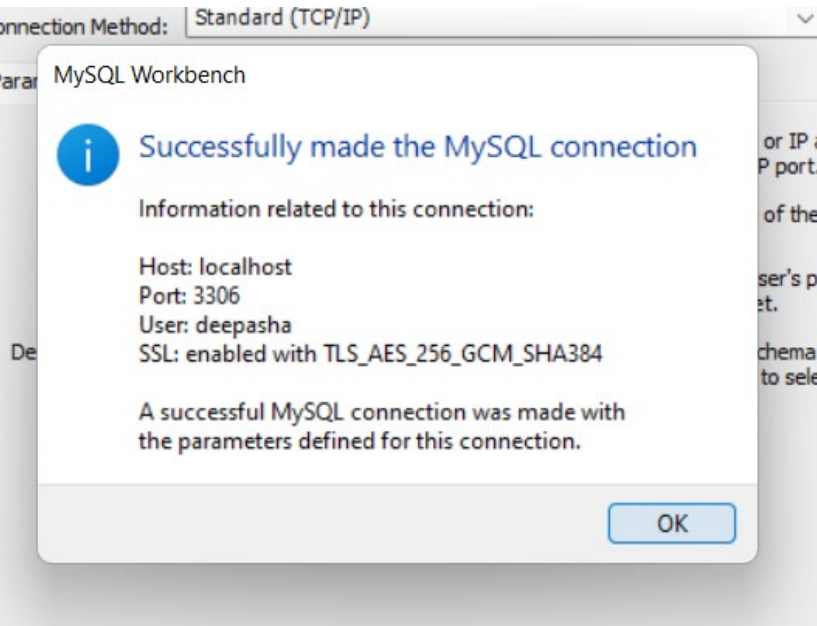
The screenshot displays the SQL Developer interface. On the left, the 'SCHEMAS' pane shows a tree view with 'group_project_225' expanded, revealing tables like 'cdc_covid_data_local' and 'cdc_covid_data_without_partition'. The 'Table: cdc_covid_data_without_partition' is selected, showing its columns and data types. The main editor window contains the following SQL script:

```
1
2
3 create user 'gayathri' identified by 'welcome123';
4 create user 'keerthana' identified by 'welcome123';
5 create user 'deepasha' identified by 'welcome123';
6
7 GRANT SELECT,INSERT,UPDATE,DELETE ON group_project_225.cdc_covid_data_local TO 'gayathri' WITH GRANT OPTION;
8 GRANT SELECT,INSERT,UPDATE,DELETE ON group_project_225.cdc_covid_data_without_partition TO 'gayathri' WITH GRANT OPTION;
9 GRANT SELECT,INSERT ON group_project_225.cdc_covid_data_local TO 'keerthana' WITH GRANT OPTION;
10 GRANT SELECT,INSERT ON group_project_225.cdc_covid_data_without_partition TO 'keerthana' WITH GRANT OPTION;
11 GRANT SELECT ON group_project_225.cdc_covid_data_local TO 'deepasha' WITH GRANT OPTION;
12 GRANT SELECT ON group_project_225.cdc_covid_data_without_partition TO 'deepasha' WITH GRANT OPTION;
13
14
```

The 'Output' pane at the bottom shows the execution results of these commands:

#	Time	Action	Message	Duration / Fetch
1	22:39:45	create user 'gayathri' identified by 'welcome123'	0 row(s) affected	0.000 sec
2	22:39:45	create user 'keerthana' identified by 'welcome123'	0 row(s) affected	0.000 sec
3	22:39:45	create user 'deepasha' identified by 'welcome123'	0 row(s) affected	0.000 sec
4	22:39:45	GRANT SELECT,INSERT,UPDATE,DELETE ON group_project_225.cdc_covid_data_local TO 'gayathri' WITH GRANT OPTION;	0 row(s) affected	0.000 sec
5	22:39:45	GRANT SELECT,INSERT,UPDATE,DELETE ON group_project_225.cdc_covid_data_without_partition TO 'gayathri' WITH GRANT OPTION;	0 row(s) affected	0.015 sec
6	22:39:45	GRANT SELECT,INSERT ON group_project_225.cdc_covid_data_local TO 'keerthana' WITH GRANT OPTION;	0 row(s) affected	0.000 sec
7	22:39:45	GRANT SELECT,INSERT ON group_project_225.cdc_covid_data_without_partition TO 'keerthana' WITH GRANT OPTION;	0 row(s) affected	0.000 sec
8	22:39:45	GRANT SELECT ON group_project_225.cdc_covid_data_local TO 'deepasha' WITH GRANT OPTION;	0 row(s) affected	0.000 sec
9	22:39:45	GRANT SELECT ON group_project_225.cdc_covid_data_without_partition TO 'deepasha' WITH GRANT OPTION;	0 row(s) affected	0.000 sec

USERS CREATED:



TESTING PERMISSIONS OF USER DEEPASHA (READ -ONLY)

```
insert into group_project_225.cdc_covid_data_local values('2020-12','TN','47','NA','NA','0 - 17 years','Female','White','Non-Hispanic/Latino','0','Missing','Missing','Laboratory-confirmed case','Unknown','Missing','Missing','Missing','');
insert into group_project_225.cdc_covid_data_local values('2020-12','TN','47','NA','NA','0 - 17 years','Female','White','Non-Hispanic/Latino','0','0','Missing','Missing','Laboratory-confirmed case','Symptomatic','No','Missing','Missing','');
insert into group_project_225.cdc_covid_data_local values('2020-12','TN','47','NA','NA','0 - 17 years','Female','White','Non-Hispanic/Latino','1','0','Missing','Missing','Probable Case','Symptomatic','No','Missing','Missing','');
```

The screenshot shows a SQL query editor with three insert statements. The output pane displays an error message: "Error Code: 1142. INSERT command denied to user 'deepasha'@'localhost' for table 'cdc_covid_data_local'".

```
1 • insert into group_project_225.cdc_covid_data_local values('2020-12','TN','47','NA','NA','0 - 17 years','Female','White','Non-Hispanic/Latino','0','Missing','Missing','Laboratory-confirmed case','Unknown','Missing','Missing','Missing','');
2 • insert into group_project_225.cdc_covid_data_local values('2020-12','TN','47','NA','NA','0 - 17 years','Female','White','Non-Hispanic/Latino','0','0','Missing','Missing','Laboratory-confirmed case','Symptomatic','No','Missing','Missing','');
3 • insert into group_project_225.cdc_covid_data_local values('2020-12','TN','47','NA','NA','0 - 17 years','Female','White','Non-Hispanic/Latino','1','0','Missing','Missing','Probable Case','Symptomatic','No','Missing','Missing','');
```

#	Time	Action	Message	Duration / Fetch
1	23:52:29	insert into group_project_225.cdc_covid_data_local values('2020-12','TN','47','NA','NA','0 - 17 years','Female','White','Non-Hispanic/Latino','0','Missing','Missing','Laboratory-confirmed case','Unknown','Missing','Missing','Missing','');	Error Code: 1142. INSERT command denied to user 'deepasha'@'localhost' for table 'cdc_covid_data_local'	0.000 sec

```
select * from cdc_covid_data_local limit 1;
```

The screenshot shows a SQL query editor with a select statement. The output pane displays a result grid with one row of data. The result grid has columns: case_month, res_state, state_fips_code, res_county, county_fips_code, age_group, sex, race, ethnicity, case_positive_specimen_interval, case_onset_interval, and prc.

```
6 • select * from cdc_covid_data_local limit 1;
```

case_month	res_state	state_fips_code	res_county	county_fips_code	age_group	sex	race	ethnicity	case_positive_specimen_interval	case_onset_interval	prc
2021-12	TN	47	NA	NA	0 - 17 years	Female	White	Non-Hispanic/Latino	0	0	Miss

cdc_covid_data_local2 x Read Only

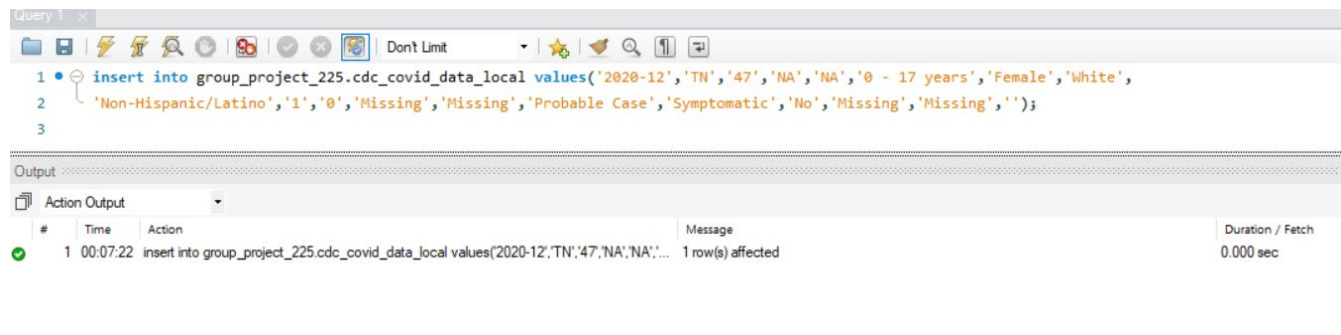
#	Time	Action	Message	Duration / Fetch
1	23:54:32	select * from cdc_covid_data_local limit 1	1 row(s) returned	0.000 sec / 0.000 sec

Since only read permissions were given to the user deepsha , insert action is denied.

TESTING PERMISSIONS OF USER KEERTHANA (RESTRICTED READ WRITE)

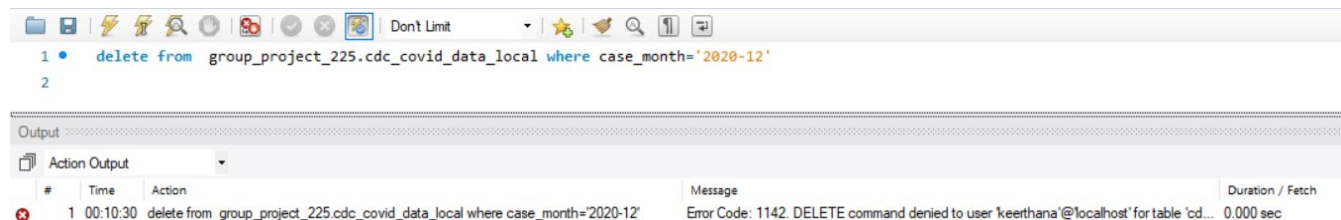
INSERT:

```
insert into group_project_225.cdc_covid_data_local values('2020-12','TN','47','NA','NA','0 - 17 years','Female','White','Non-Hispanic/Latino','1','0','Missing','Missing','Probable Case','Symptomatic','No','Missing','Missing','');
```



DELETE:

```
delete from group_project_225.cdc_covid_data_local where case_month='2020-12'
```



Since only restricted read write permissions were given to the user keerrthana , delete is denied.

TESTING PERMISSIONS OF USER GAYATHRI (ADMIN – FULL PERMISSIONS)

INSERT:

```
insert into group_project_225.cdc_covid_data_local values('2020-12','TX','47','NA','NA','0 - 17 years','Female','White','Non-Hispanic/Latino','0','0','Missing','Missing','Laboratory-confirmed case','Symptomatic','No','Missing','Missing','');
```

1 • `insert into group_project_225.cdc_covid_data_local values('2020-12','TX','47','NA','NA','0 - 17 years','Female','White','Non-Hispanic/`
 2 |

Output

#	Time	Action	Message	Duration / Fetch
1	00:14:35	insert into group_project_225.cdc_covid_data_local values('2020-12','TX','47','NA','NA','...	1 row(s) affected	0.000 sec

UPDATE:

```
SET SQL_SAFE_UPDATES = 0;
update group_project_225.cdc_covid_data_local
set sex = 'male'
where case_month = '2020-12';
```

1 • `SET SQL_SAFE_UPDATES = 0;`
 2 • `update group_project_225.cdc_covid_data_local`
 3 `set sex = 'male'`
 4 `where case_month = '2020-12';`
 5

Output

#	Time	Action	Message	Duration / Fetch
1	00:16:37	SET SQL_SAFE_UPDATES = 0	0 row(s) affected	0.000 sec
2	00:16:37	update group_project_225.cdc_covid_data_local set sex = 'male' where case_month = '2020-12'	3 row(s) affected Rows matched: 3 Changed: 3 Warnings: 0	4.265 sec

DELETE:

```
delete from group_project_225.cdc_covid_data_local where case_month='2020-12'
```

1 • `delete from group_project_225.cdc_covid_data_local where case_month='2020-12'`

Output

#	Time	Action	Message	Duration / Fetch
1	00:17:36	delete from group_project_225.cdc_covid_data_local where case_month='2020-12'	3 row(s) affected	4.484 sec

<end of document>

Submitted by : Gayathri Sundareshwar, Gayathri Sundareshwar, Deepasha Jenamani

8th May 2022