

Phase 3 SQL operations

3.1 Insert records from
42_District_wise_crimes_committed_against_women_2001_2012.csv into a
table

The screenshot displays the MySQL Workbench interface. The 'Query 1' window shows the following SQL query:

```
SELECT * FROM capstone_42_district_wise_crimes_committed_against_women_2001_2012;
```

The 'Result Grid' shows the following data:

UT	DISTRICT	Year	Rape	Kidnapping and Abduction	Doory Deaths	Assault on women with intent to outrage her modesty	Drault to modesty of Women	Cruelty by Husband Relatives
INDIA	ANDHRA PRADESH	2001	50	30	36	149	34	171
INDIA	ARUNACHAL PRADESH	2001	23	30	7	128	24	124
INDIA	CHHATTISGARH	2001	27	34	14	112	63	188
INDIA	GUJARAT	2001	20	20	17	126	38	57
INDIA	EAST GODAVARI	2001	23	28	12	109	58	247
INDIA	KARNATAKA	2001	0	8	8	1	0	8
INDIA	KERALA	2001	54	51	7	128	128	178
INDIA	HYDERABAD CITY	2001	37	38	24	128	27	246
INDIA	KARNATAKA	2001	56	48	62	404	81	224
INDIA	KHARSKH	2001	47	30	17	180	336	172
INDIA	KRISHNA	2001	37	21	30	208	72	265
INDIA	KURNOOL	2001	29	47	13	141	107	92

The 'Table: 42_district_wise_crimes_c' window shows the following columns:

- STATE/UT
- DISTRICT
- Year
- Rape
- Kidnapping and Abduction

The 'Action Output' window shows the following actions:

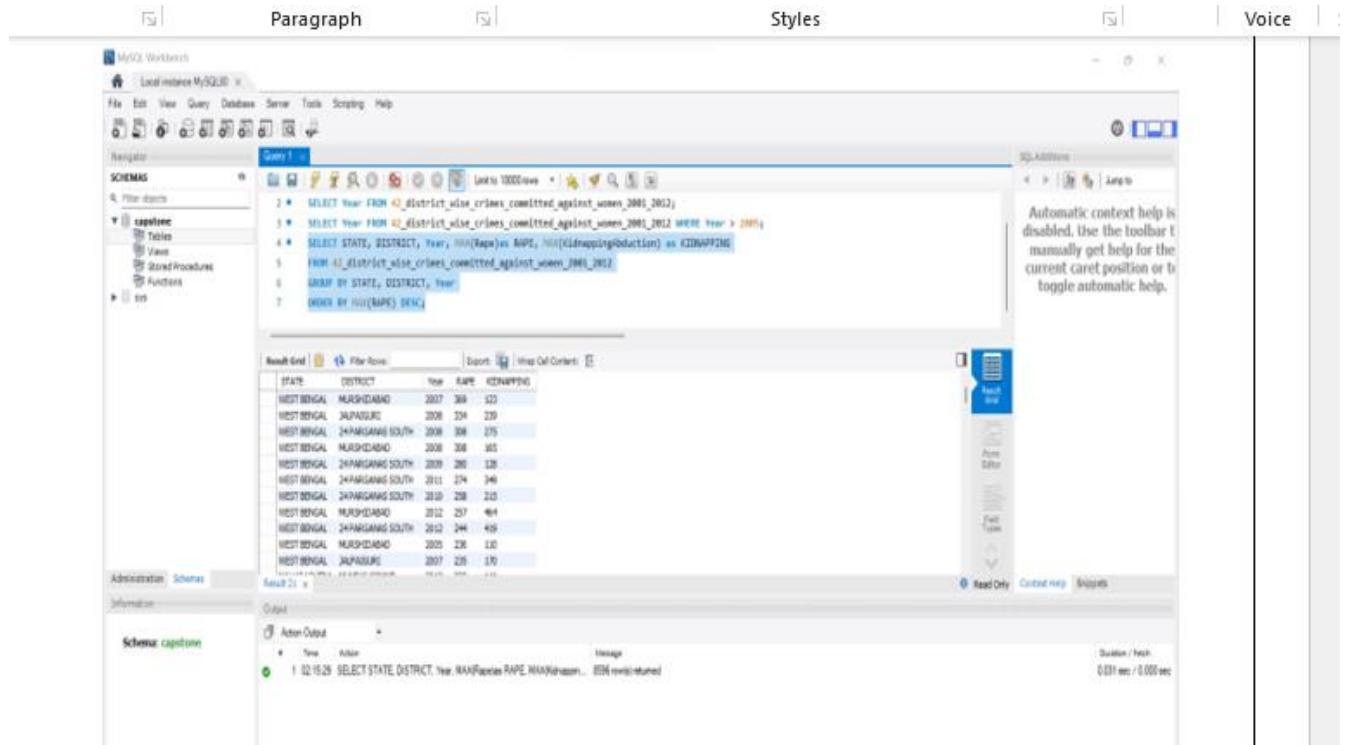
- 3 00:48:55 SHOW DATABASES OK 0:000 sec
- 4 00:48:54 SHOW SESSION VARIABLES LIKE 'lower_case_table_names' OK 0:000 sec
- 5 00:48:43 CREATE TABLE 'capstone' '42_district_wise_crimes_committed_against_women_2001_2012' (STATE/UT L... OK 0:000 sec
- 6 00:48:43 PREPARE stmt FROM INSERT INTO 'capstone' '42_district_wise_crimes_committed_against_women_2001_...' OK 0:000 sec

Query for that

Import the excel file and to see all the records type this

SELECT * FROM 42_district_wise_crimes_committed_against_women_2001_2012;

3.2 Write SQL query to find the highest number of rapes & Kidnappings that happened in which state, District, and year



Query for this question is

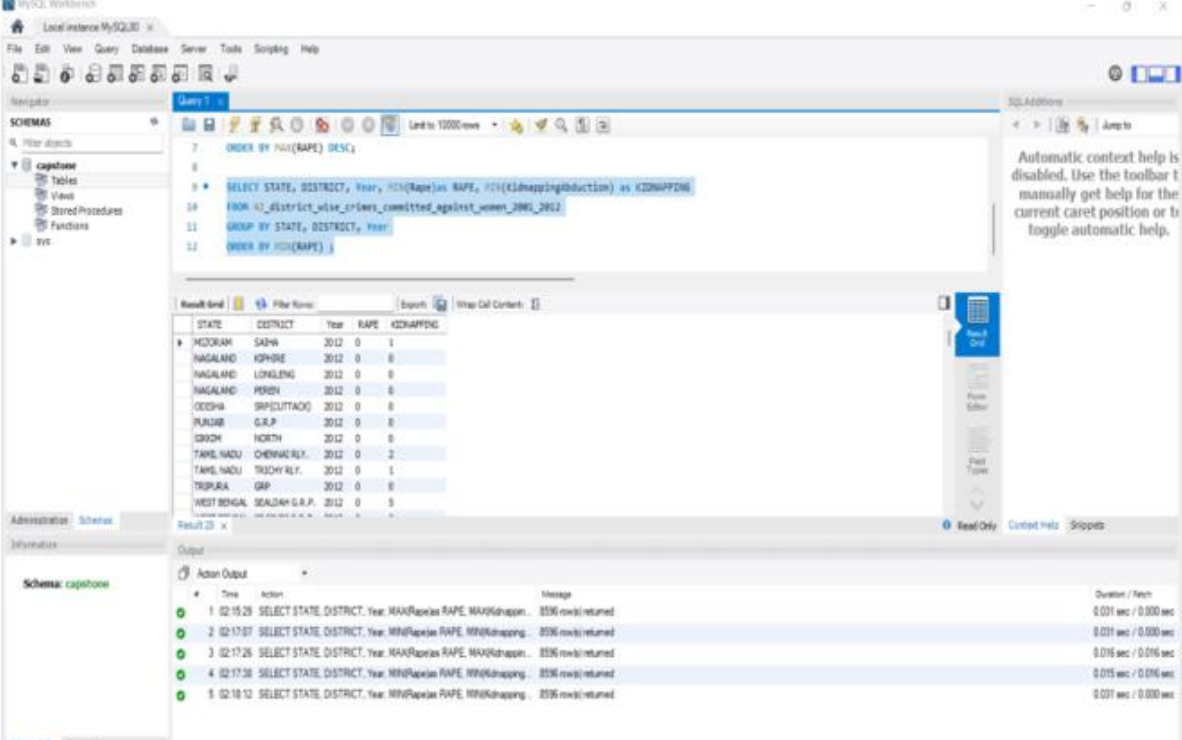
```
SELECT STATE, DISTRICT, Year, MAX(Rape)as RAPE, MAX(KidnappingAbduction) as KIDNAPPING
```

```
FROM 42_district_wise_crimes_committed_against_women_2001_2012
```

```
GROUP BY STATE, DISTRICT, Year
```

```
ORDER BY MAX(RAPE) DESC;
```

3.3 Write SQL query to find All the lowest number of rapes & Kidnappings that happened in which state, District, and year



The screenshot shows the MySQL Workbench interface. The SQL editor contains the following query:

```
7 ORDER BY MIN(RAPE) DESC;
8
9 SELECT STATE, DISTRICT, Year, MIN(Rape) as RAPE, MIN(KidnappingAbduction) as KIDNAPPING
10 FROM 42_district_wise_crimes_committed_against_women_2001_2012
11 GROUP BY STATE, DISTRICT, Year
12 ORDER BY MIN(RAPE) ;
```

The Results grid displays the following data:

STATE	DISTRICT	Year	RAPE	KIDNAPPING
ANDHRA	SADH	2012	0	1
NAGALAND	KHORE	2012	0	0
NAGALAND	LONGLENG	2012	0	0
NAGALAND	PEREN	2012	0	0
ODISHA	SPICULTADO	2012	0	0
PUNJAB	G.R.P	2012	0	0
GOA	NORTH	2012	0	0
TAMIL NADU	CHENNAI RLY.	2012	0	2
TAMIL NADU	TRICHY RLY.	2012	0	1
TAMIL NADU	GR	2012	0	0
WEST BENGAL	SEALDAH G.R.P.	2012	0	0

The Action Output pane shows the execution of the query with the following messages:

#	Time	Action	Message	Duration / Refresh
1	02:15:29	SELECT STATE, DISTRICT, Year, MAX(Rape) as RAPE, MAX(Kidnapping)	8536 rows returned	0.031 sec / 0.030 sec
2	02:17:07	SELECT STATE, DISTRICT, Year, MIN(Rape) as RAPE, MIN(Kidnapping)	8536 rows returned	0.031 sec / 0.030 sec
3	02:17:26	SELECT STATE, DISTRICT, Year, MAX(Rape) as RAPE, MAX(Kidnapping)	8536 rows returned	0.016 sec / 0.016 sec
4	02:17:38	SELECT STATE, DISTRICT, Year, MIN(Rape) as RAPE, MIN(Kidnapping)	8536 rows returned	0.015 sec / 0.016 sec
5	02:18:12	SELECT STATE, DISTRICT, Year, MIN(Rape) as RAPE, MIN(Kidnapping)	8536 rows returned	0.031 sec / 0.030 sec

Query for this question is

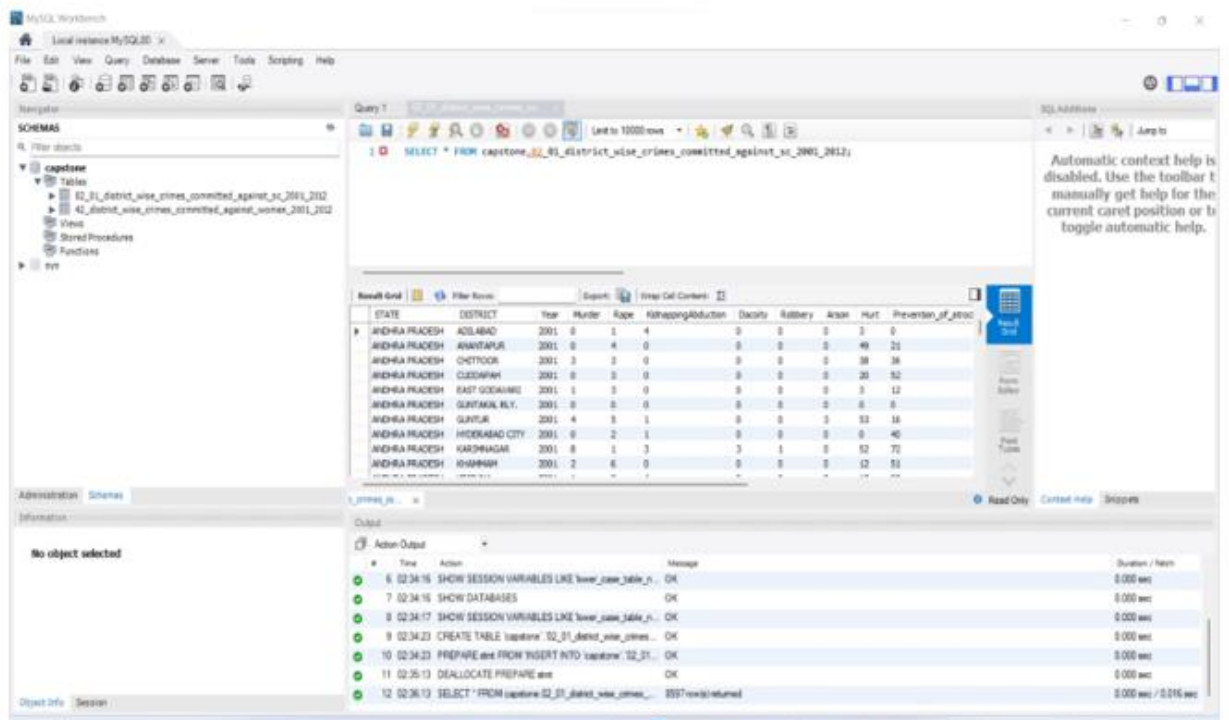
SELECT STATE, DISTRICT, Year, MIN(Rape) as RAPE, MIN(KidnappingAbduction) as KIDNAPPING

FROM 42_district_wise_crimes_committed_against_women_2001_2012

GROUP BY STATE, DISTRICT, Year

ORDER BY MIN(RAPE) ;

3.4 Insert records from 02_District_wise_crimes_committed_against_ST_2001_2012.csv into a new table

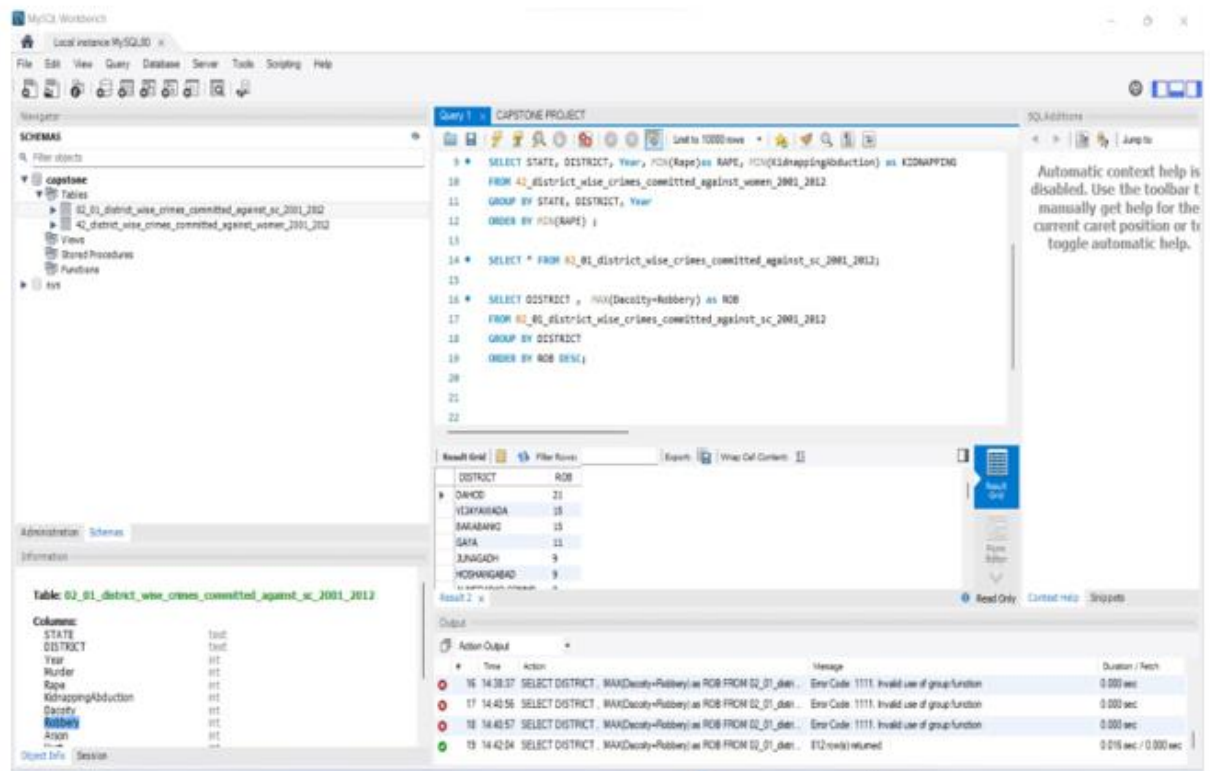


Query for that

Import the excel file and to see all the records type this

`SELECT * FROM 02_01_district_wise_crimes_committed_against_sc_2001_2012;`

3.5 Write SQL query to find the highest number of dacoity/robbery in which district.



Query for this question is

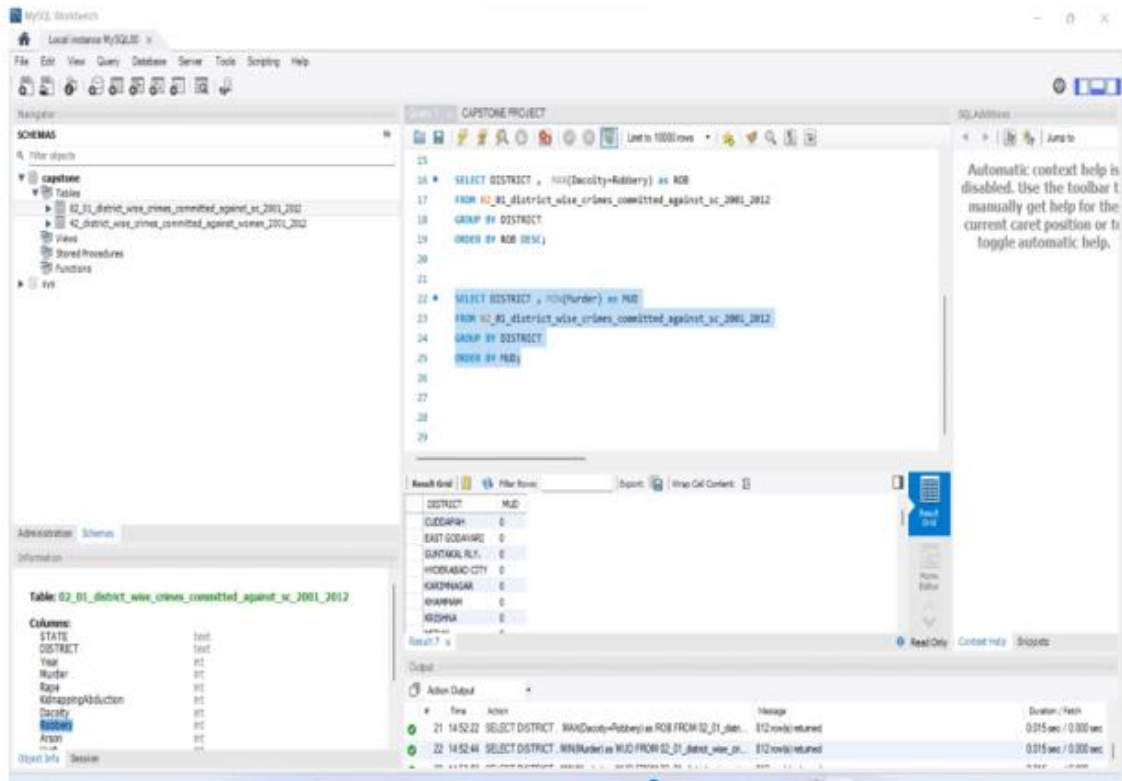
SELECT DISTRICT , MAX(Dacoity+Robbery) as ROB

FROM Q2_01_district_wise_crimes_committed_against_sc_2001_2012

GROUP BY DISTRICT

ORDER BY ROB DESC;

3.6 Write SQL query to find in which districts(All) the lowest number of murders happened.



Query for this question is

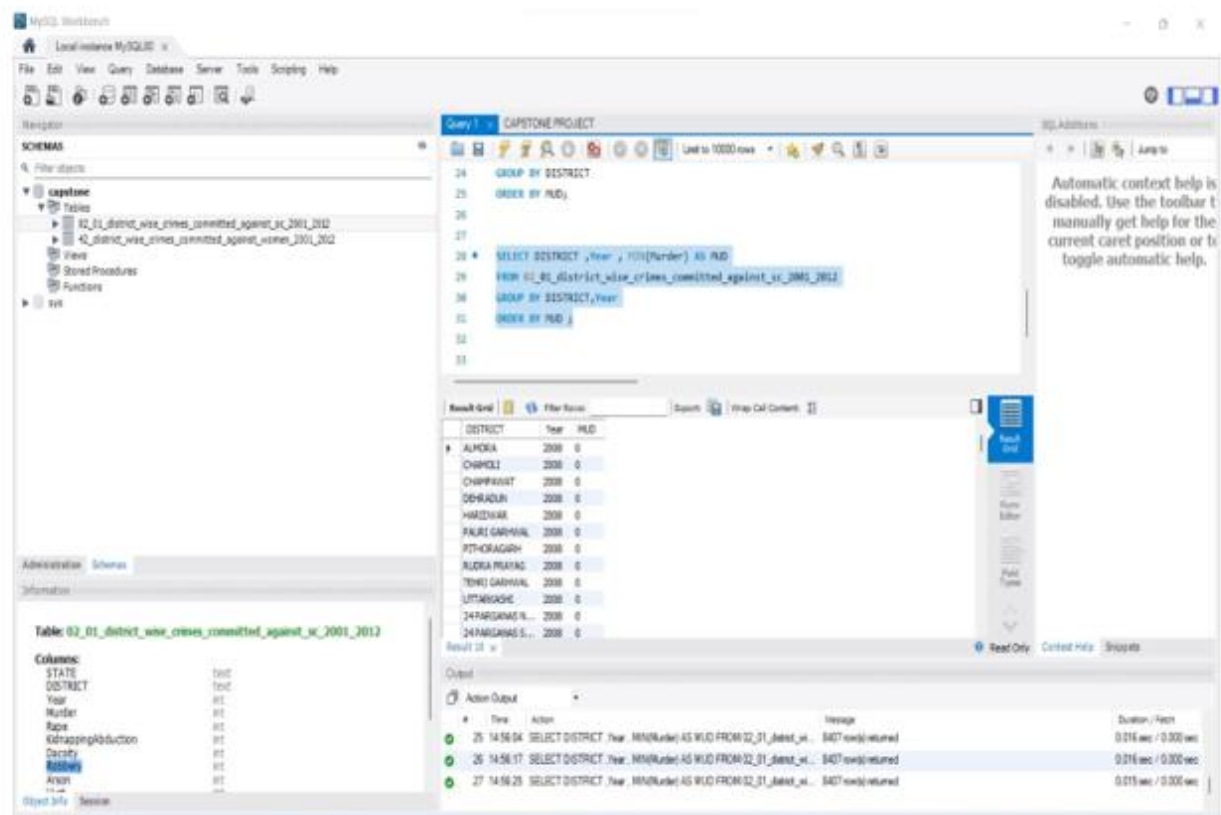
SELECT DISTRICT , MIN(Murder) as MUD

FROM 02_01_district_wise_crimes_committed_against_sc_2001_2012

GROUP BY DISTRICT

ORDER BY MUD;

3.7 Write SQL query to find the number of murders in ascending order in district and yearwise.



Query for this question is

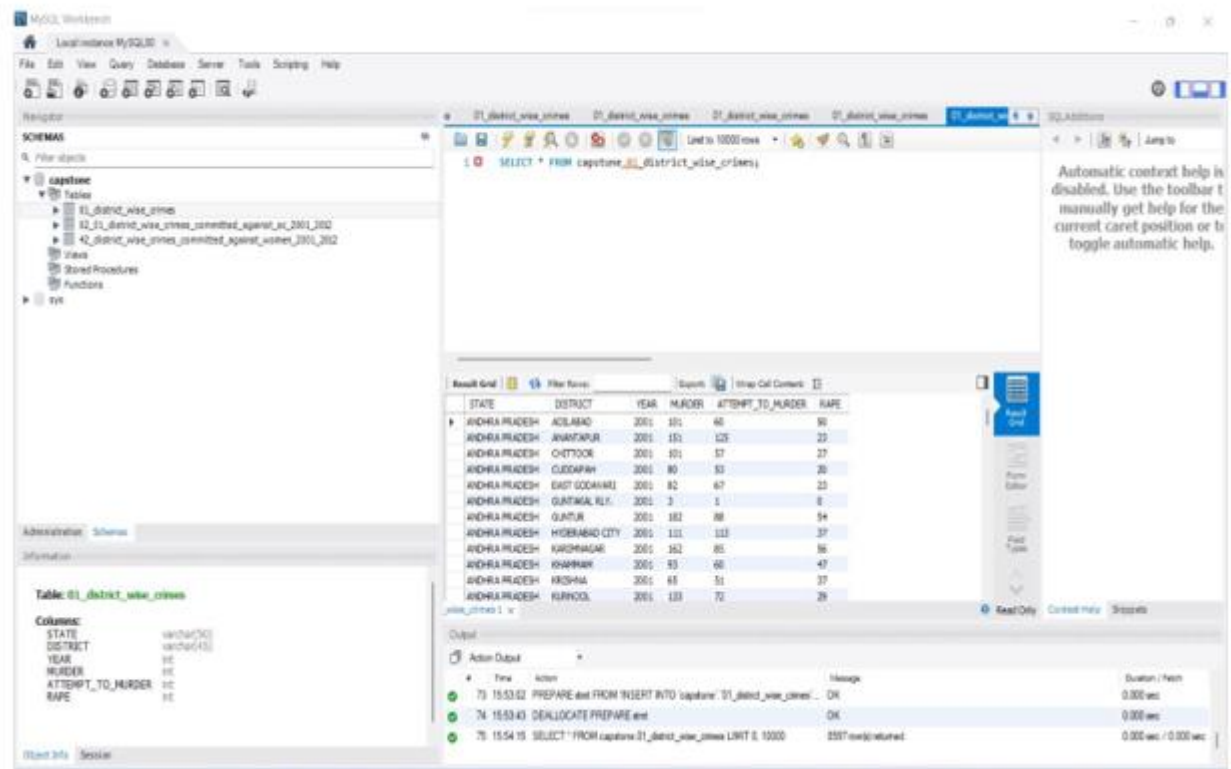
```
SELECT DISTRICT ,Year , MIN(Murder) AS MUD
```

```
FROM 02_01_district_wise_crimes_committed_against_sc_2001_2012
```

```
GROUP BY DISTRICT,Year
```

```
ORDER BY MUD ;
```

3.8.1 Insert records of STATE/UT, DISTRICT, YEAR, MURDER, ATTEMPT TO MURDER, and RAPE columns only from 01_District_wise_crimes_committed_IPC_2001_2012.csv into a new table

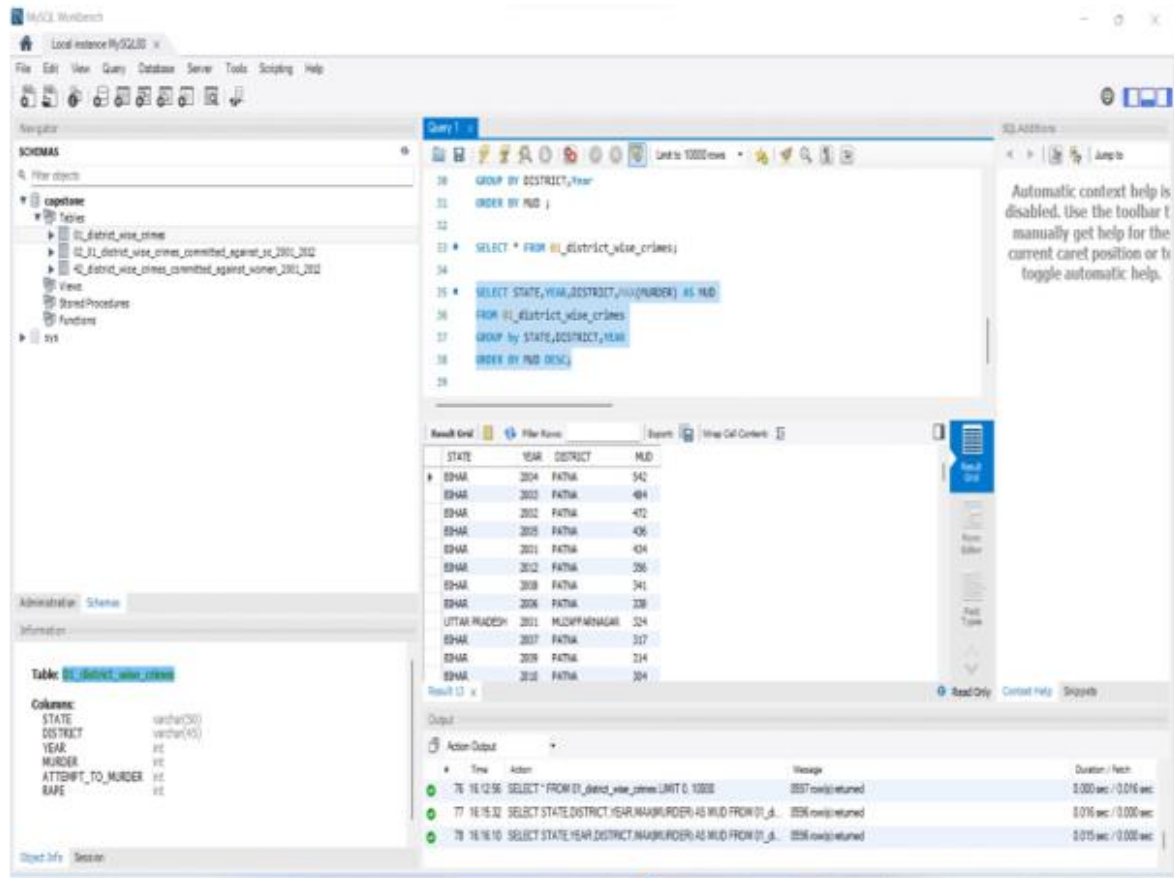


Query for that

Import the excel file with selected column which we want and to see all the records type this

SELECT * FROM 01_district_wise_crimes;

3.8.2 Write SQL query to find which District in each state/ut has the highest number of murders yearwise. Your output should show STATE/UT, YEAR, DISTRICT, and MURDERS.



Query for this question is

SELECT STATE,year,DISTRICT,(MAX(MURDER) AS MUD

FROM 01_district_wise_crimes

GROUP by STATE,DISTRICT,year

ORDER BY MUD DESC;

3.8.3 Store the above data (the result of 3.2) in DataFrame and analyze districts that appear 3 or more than 3 years and print the corresponding state/ut, district, murders, and year in descending order.

Query for this question is

```
SELECT * FROM answer;
```

```
SELECT STATE,DISTRICT,MUD,YEAR
```

```
FROM answer
```

```
WHERE DISTRICT IN (
```

```
    SELECT DISTRICT
```

```
    FROM answer
```

```
    GROUP BY DISTRICT
```

```
    HAVING COUNT(DISTINCT YEAR) >= 3
```

```
)
```

```
ORDER BY DISTRICT DESC , YEAR DESC;
```

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Sharma

Date - 16-11-2023

Time - 15:37