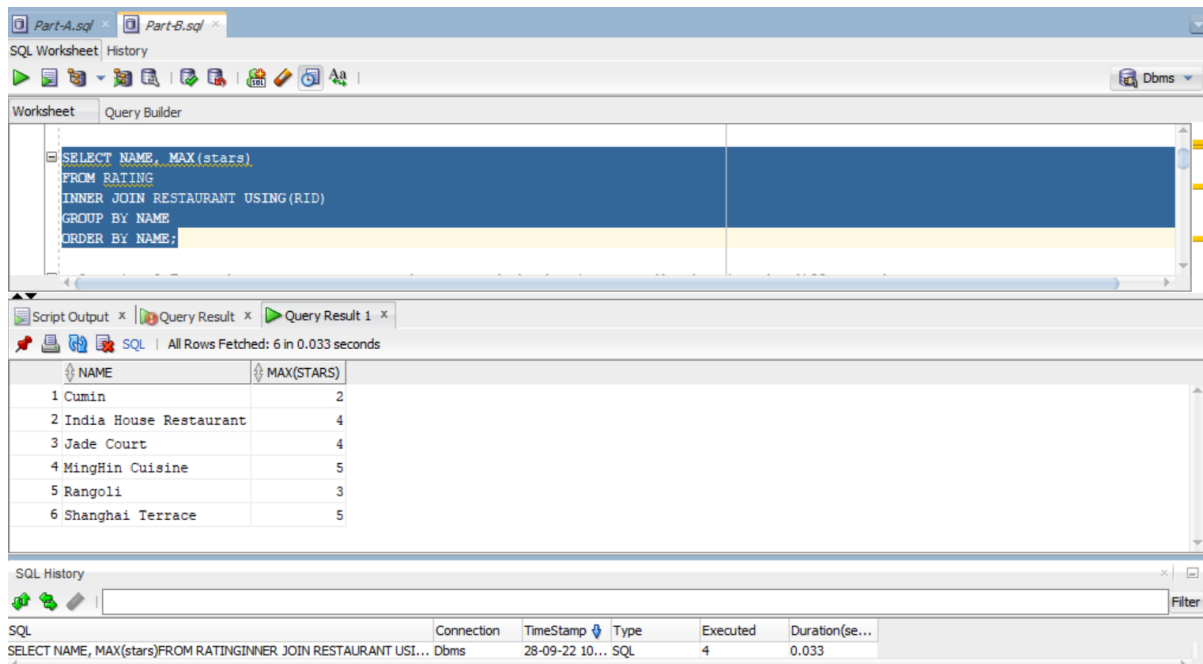


Question 1: For each restaurant that has at least one rating, find the highest number of stars that a restaurant received. Return the restaurant name and number of stars. Sort by restaurant name.



The screenshot shows an SQL Worksheet with the following query in the Query Builder:

```
SELECT NAME, MAX(stars)
FROM RATING
INNER JOIN RESTAURANT USING(RID)
GROUP BY NAME
ORDER BY NAME;
```

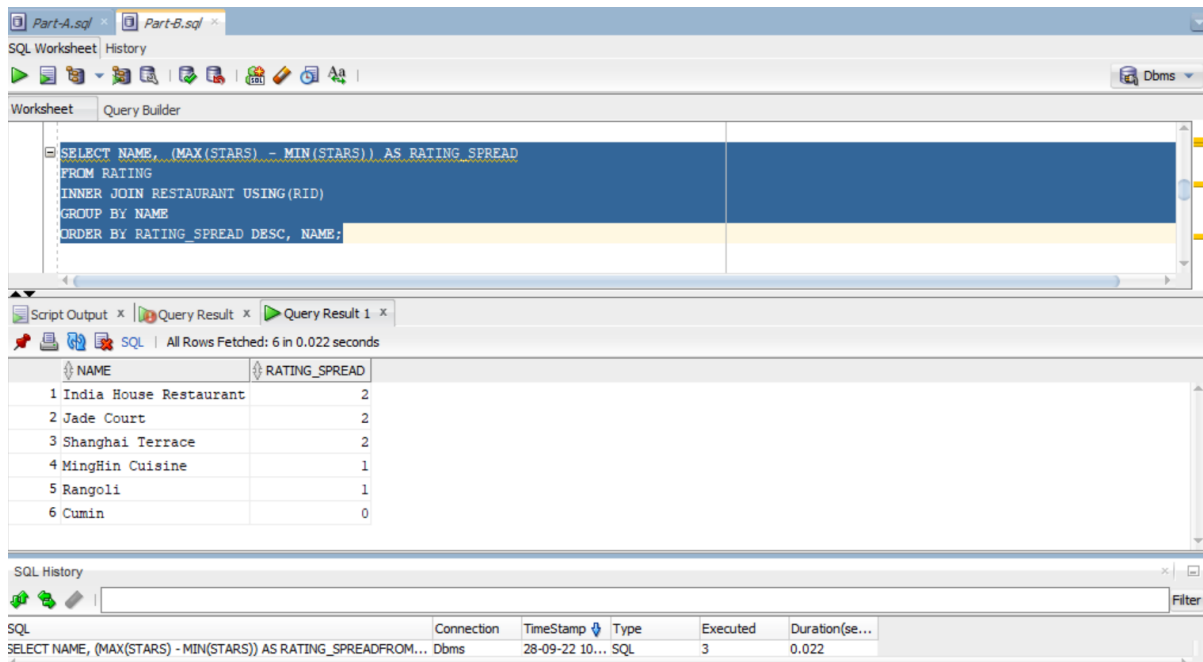
The Query Result shows 6 rows fetched in 0.033 seconds. The results are as follows:

NAME	MAX(STARS)
1 Cumin	2
2 India House Restaurant	4
3 Jade Court	4
4 MingHin Cuisine	5
5 Rangoli	3
6 Shanghai Terrace	5

The SQL History shows the executed query and its details:

SQL	Connection	TimeStamp	Type	Executed	Duration(se...)
SELECT NAME, MAX(stars) FROM RATING INNER JOIN RESTAURANT USI...	Dbms	28-09-22 10...	SQL	4	0.033

Question 2: For each restaurant, return the name and the 'rating spread', that is, the difference between highest and lowest ratings given to that restaurant. Sort by rating spread from highest to lowest, then by restaurant name.



The screenshot shows an SQL Worksheet with the following query in the Query Builder:

```
SELECT NAME, (MAX(STARS) - MIN(STARS)) AS RATING_SPREAD
FROM RATING
INNER JOIN RESTAURANT USING(RID)
GROUP BY NAME
ORDER BY RATING_SPREAD DESC, NAME;
```

The Query Result shows 6 rows fetched in 0.022 seconds. The results are as follows:

NAME	RATING_SPREAD
1 India House Restaurant	2
2 Jade Court	2
3 Shanghai Terrace	2
4 MingHin Cuisine	1
5 Rangoli	1
6 Cumin	0

The SQL History shows the executed query and its details:

SQL	Connection	TimeStamp	Type	Executed	Duration(se...)
SELECT NAME, (MAX(STARS) - MIN(STARS)) AS RATING_SPREAD FROM...	Dbms	28-09-22 10...	SQL	3	0.022

Question 3: Find the difference between the average rating of Indian restaurants and the average rating of Chinese restaurants. (Make sure to calculate the average rating for each restaurant, Then the average of those averages for Indian and Chinese restaurants. Don't just calculate the overall average rating for Indian and Chinese restaurants.) Note: The difference can be negative.

The screenshot shows a SQL Worksheet with a query that calculates the difference between the average rating of Indian and Chinese restaurants. The query uses subqueries to find the average rating for each cuisine and then calculates the difference between them.

```
SELECT ROUND(MAX(A)-MIN(A),2) AS DIFFERENCE FROM
(SELECT AVG(A1) A FROM (SELECT AVG(STARS) AS A1 FROM RATING R1 JOIN RESTAURANT R2 ON R1.RID=R2.RID WHERE R2.CUISINE='Indian')
UNION
SELECT AVG(A2) A FROM (SELECT AVG(STARS) AS A2 FROM RATING R1 INNER JOIN RESTAURANT R2 ON R1.RID=R2.RID WHERE CUISINE='Chinese'));
```

The query result shows a single row with the value 1.19 for the DIFFERENCE column.

DIFFERENCE
1.19

The SQL History panel shows the query was executed on 28-09-22 at 10:00, taking 0.037 seconds.

Question 4:

Are there reviewers who reviewed both Indian and Chinese restaurants? Write a query and answer Yes/No.

The screenshot shows a SQL Worksheet with a query that finds reviewers who have reviewed both Indian and Chinese restaurants. The query uses an INTERSECT operator to find the common reviewers between the two cuisines.

```
--QUESTION 4: Are there reviewers who reviewed both Indian and Chinese restaurants? Write a query and answer Yes/No.
SELECT R2.NAME FROM RATING R1 INNER JOIN REVIEWER R2 ON R2.VID=R1.VID INNER JOIN RESTAURANT R3 ON R3.RID=R1.RID WHERE R3.CUISINE='Indi'
INTERSECT
SELECT R2.NAME FROM RATING R1 INNER JOIN REVIEWER R2 ON R2.VID=R1.VID INNER JOIN RESTAURANT R3 ON R3.RID=R1.RID WHERE R3.CUISINE='Chin';
```

The query result shows two rows of reviewer names: B. Harris and Suikey S.

NAME
B. Harris
Suikey S.

The SQL History panel shows the query was executed on 28-09-22 at 10:00, taking 0.031 seconds.