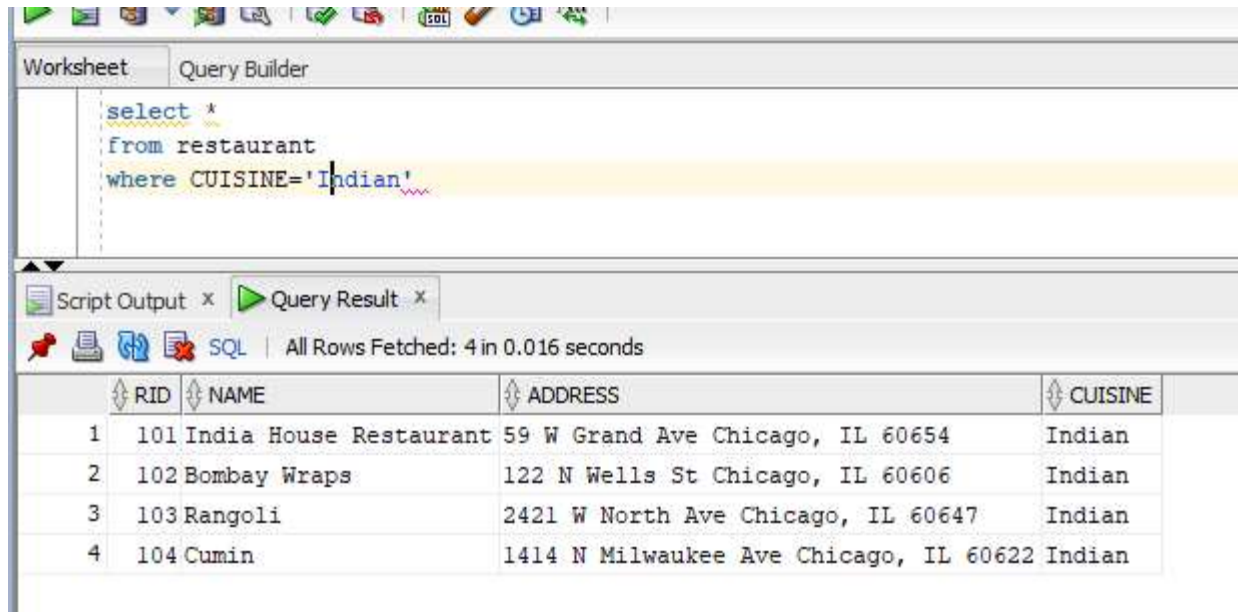


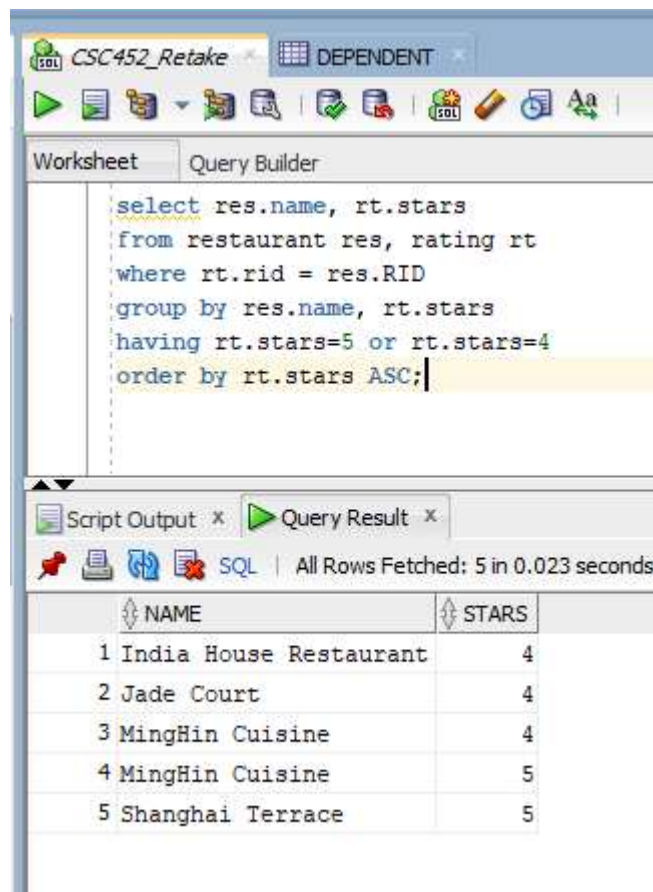
1. [1pt] Find the name of all restaurants offering Indian cuisine



The screenshot shows a SQL query builder window with a 'Query Builder' tab. The query is: `select * from restaurant where CUISINE='Indian'`. Below the query, the 'Query Result' tab is active, showing a table with 4 rows and 4 columns: RID, NAME, ADDRESS, and CUISINE. The status bar indicates 'All Rows Fetched: 4 in 0.016 seconds'.

RID	NAME	ADDRESS	CUISINE
1	101 India House Restaurant	59 W Grand Ave Chicago, IL 60654	Indian
2	102 Bombay Wraps	122 N Wells St Chicago, IL 60606	Indian
3	103 Rangoli	2421 W North Ave Chicago, IL 60647	Indian
4	104 Cumin	1414 N Milwaukee Ave Chicago, IL 60622	Indian

2. [2pt] Find restaurant names that received a rating of 4 or 5, sort them in increasing order.



The screenshot shows a SQL query builder window with a 'Query Builder' tab. The query is: `select res.name, rt.stars from restaurant res, rating rt where rt.rid = res.RID group by res.name, rt.stars having rt.stars=5 or rt.stars=4 order by rt.stars ASC;`. Below the query, the 'Query Result' tab is active, showing a table with 5 rows and 2 columns: NAME and STARS. The status bar indicates 'All Rows Fetched: 5 in 0.023 seconds'.

NAME	STARS
1 India House Restaurant	4
2 Jade Court	4
3 MingHin Cuisine	4
4 MingHin Cuisine	5
5 Shanghai Terrace	5

3. [2pt] Find the names of all restaurants that have no rating.

The screenshot shows a SQL query in the Query Builder window of a database application. The query is:

```
select rid, name
from restaurant
where rid not in (select rid from rating);
```

The Query Result window shows the following data:

RID	NAME
1	105 Shanghai Inn
2	102 Bombay Wraps

4. [2pt] Some reviewers didn't provide a date with their rating. Find the names of all reviewers who have ratings with a NULL value for the date.

The screenshot shows a SQL query in the Query Builder window of a database application. The query is:

```
select res.rid, res.name, rt.ratingdate
from restaurant res, rating rt
where res.rid=rt.RID and rt.ratingdate is null;
```

The Query Result window shows the following data:

RID	NAME	RATINGDATE
1	106 MingHin Cuisine	(null)
2	108 Jade Court	(null)

5. [4pt] For all cases where the same reviewer rated the same restaurant twice and gave it a higher rating the second time, return the reviewer's name and the name of the restaurant.

The screenshot shows a SQL query builder interface with the following query:

```
select rev.name, res.NAME
from reviewer rev, restaurant res,
( select rid,vid, count(stars) as count
  from rating
  group by rID, vid ) rt_count
where res.rid=rt_count.rid and rt_count.count>=2 and rev.vid=rt_count.vid;
```

The query result is displayed in a table with two columns: NAME and NAME_1. The results are:

	NAME	NAME_1
1	Sarah M.	India House Restaurant
2	B. Harris	Jade Court

6. [4pt] 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 a SQL query builder interface with the following query:

```
select res.NAME, MAX(rt_max.max_stars) as Max_Rating
from reviewer rev, restaurant res,
( select rid,vid, Max(stars) as max_stars
  from rating
  group by rID,vid ) rt_max
where res.rid=rt_max.rid and res.rid=rt_max.rid and rev.vid=rt_max.vid
group by res.Name;
```

The query result is displayed in a table with two columns: NAME and MAX_RATING. The results are:

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

7. [5pt] 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.

No answer

8. [5pt] 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.)

No answer