

CSC 453 HW2 Part-B

Lavinia Wang

1473704

The screenshot shows the SQL Developer interface with the 'ComputerStore.sql' file open. The 'Worksheet' tab is active, displaying a query in the 'Query Builder' grid:

```
1 -- 1. Find the name of all restaurants offering Indian cuisine
2 SELECT name
3 FROM restaurant
4 WHERE cuisine = 'Indian';
```

The 'Reports' tab is also visible, showing a list of reports under 'All Reports'. The 'Query Result' tab shows the results of the query:

NAME
1 India House Restaurant
2 Bombay Wraps
3 Rangoli
4 Cumin

The 'SQL History' tab at the bottom shows the executed query:

```
SELECT name FROM restaurant WHERE cuisine = 'Indian';
```

The status bar at the bottom indicates: 'Click on an identifier with the Command key down to perform "Go to Declaration"'. The bottom right corner shows: 'Line 4 Column 26 | Insert | Modified! Unix/Mac: LF'.

The screenshot shows the SQL Developer interface with the 'ComputerStore.sql' file open. The 'Worksheet' tab is active, displaying a query in the 'Query Builder' grid:

```
1 -- 2. Find restaurant names that received a rating of 4 or 5, sort them in increasing order.
2 SELECT DISTINCT r1.name
3 FROM restaurant r1, (SELECT rid, stars FROM rating WHERE stars = 4 OR stars = 5)r2
4 WHERE r1.rid = r2.rid
5 ORDER BY r1.name ASC;
```

The 'Reports' tab is also visible, showing a list of reports under 'All Reports'. The 'Query Result' tab shows the results of the query:

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

The 'SQL History' tab at the bottom shows the executed query:

```
SELECT DISTINCT r1.name FROM restaurant r1, (SELECT rid, stars FROM rating WHERE stars = 4 OR stars = 5)r2 WHERE r1.rid = r2.rid ORDER BY r1.name ASC;
```

The status bar at the bottom indicates: 'Click on an identifier with the Command key down to perform "Go to Declaration"'. The bottom right corner shows: 'Line 6 Column 1 | Insert | Modified! Unix/Mac: LF'.

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The screenshot shows the SQL Developer interface. The left pane displays a schema tree with tables like ENROLLED, GAME, HANDLES, INJURY_RECORD, LOAN, MANUFACTURERS, MEMBEROF, PLAYER, PRODUCTS, RATING, RESTAURANT, REVIEWER, STUDENT, STUDENTGROUP, and TEAM. The main workspace is in 'Worksheet' mode, showing a query to find restaurants with no rating. The query is:
1 -- 3. Find the names of all restaurants that have no rating.
2 SELECT DISTINCT r1.name
3 FROM restaurant r1
4 WHERE r1.rid NOT IN (SELECT rid FROM rating);
The 'Query Result' pane shows 2 rows: 'Bombay Wraps' and 'Shanghai Inn'. The 'SQL History' pane at the bottom shows the executed query and its details.

Click on an identifier with the Command key down to perform "Go to Declaration"

The screenshot shows the SQL Developer interface. The left pane displays the same schema tree. The main workspace is in 'Worksheet' mode, showing a query to find reviewers who have ratings with a NULL value for the date. The query is:
1 -- 4. 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.
2 SELECT name
3 FROM reviewer r1, rating r2
4 WHERE r1.rid = r2.rid AND r2.ratingdate IS NULL;
The 'Query Result' pane shows 2 rows: 'Daniel L.' and 'Suikey S.'. The 'SQL History' pane at the bottom shows the executed query and its details.

Click on an identifier with the Command key down to perform "Go to Declaration"

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The screenshot shows the SQL Developer interface with a query in the Worksheet pane. The query is designed to find restaurants that have been rated twice, where the second rating is higher than the first. The query uses subqueries to find the first and second ratings for each restaurant and then compares them.

```

1 -- 5. 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.
2 SELECT rest.name, rev.name
3 FROM restaurant rest, reviewer rev,
4      (SELECT r2.rid, r2.vid, r2.stars
5       FROM rating r1, rating r2
6       WHERE r1.rid = r2.rid AND r1.vid = r2.vid AND r2.stars > r1.stars AND r2.ratingdate > r1.ratingdate) t
7 WHERE t.rid = rest.rid AND t.vid = rev.vid;

```

The Results pane shows the output of the query, which is a single row:

NAME	NAME_1
India House Restaurant	Sarah H.

The SQL History pane at the bottom shows the executed query and its details.

The screenshot shows the SQL Developer interface with a query in the Worksheet pane. The query is designed to find the highest number of stars a restaurant received, sorted by the number of stars. The query uses a subquery to find the maximum stars for each restaurant and then joins it back to the restaurant table.

```

1 -- 6. 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.
2 SELECT DISTINCT rest.name, rat1.stars
3 FROM restaurant rest, rating rat1
4 WHERE rest.rid = rat1.rid AND rat1.stars IN (SELECT MAX(stars) FROM rating rat2 WHERE rat1.rid = rat2.rid)
5 ORDER BY rest.name;
6

```

The Results pane shows the output of the query, which is a list of restaurants and their highest star ratings:

NAME	STARS
Cumin	3
India House Restaurant	4
Jade Court	4
Minglin Cuisine	5
Rangoli	3
Shanghai Terrace	5

The SQL History pane at the bottom shows the executed query and its details.

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The screenshot shows the DBeaver SQL editor with a query to calculate the rating spread for restaurants. The query is as follows:

```

1  -- 7. 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
2  WITH difference AS
3  (SELECT rest.riid, MAX(stars) - MIN(stars) AS diff
4   FROM restaurant rest, rating rat
5   WHERE rest.riid = rat.riid
6   GROUP BY rest.riid)
7  SELECT rest1.name, difference.diff AS rating_spread
8  FROM restaurant rest1, difference
9  WHERE rest1.riid = difference.riid
10 ORDER BY rating_spread DESC, rest1.name ASC;

```

The results table shows the following data:

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

The bottom status bar indicates the current line and column: "Click on an identifier with the Command key down to perform 'Go to Declaration'" and "Line 10 Column 45".

The screenshot displays the Microsoft SQL Server Enterprise Manager interface. The 'Connections' pane on the left shows a tree view of the 'ComputerStore.sql' database, including tables like ENROLLED, GAME, HANDLES, INJURY_RECORD, LOAN, MANUFACTURERS, and others. The 'Query Builder' tab is active, displaying a SQL query (Query Result 5) that calculates the difference between the average rating of Indian restaurants and the average rating of Chinese restaurants. The query is:

```

1 -- 8. 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,
2 WITH indavg AS
3 (SELECT rest.rid, avg(rat.stars) AS rating
4 FROM restaurant rest, rating rat
5 WHERE rest.rid = rat.rid
6 GROUP BY rest.rid)
7 SELECT (inavg.Indian - cnavg.Chinese) AS difference
8 FROM
9 (SELECT avg(indavg.rating) AS Indian
10 FROM restaurant rest1, indavg
11 WHERE rest1.rid = indavg.rid AND rest1.cuisine = 'Indian'
12 GROUP BY rest1.cuisine) inavg,
13 (SELECT avg(cnavg.rating) AS Chinese
14 FROM restaurant rest1, cnavg
15 WHERE rest1.rid = cnavg.rid AND rest1.cuisine = 'Chinese'
16 GROUP BY rest1.cuisine) cnavg;

```

The 'Reports' pane on the right shows a list of reports, including 'All Reports', 'Analytic View Reports', 'Data Dictionary Reports', 'Data Modeler Reports', 'OLAP Reports', 'TimesTen Reports', and 'User Defined Reports'. The 'SQL History' pane at the bottom shows a list of executed queries, including the current query. The status bar at the bottom indicates 'Click on an identifier with the Command key down to perform "Go to Declaration"'. The bottom status bar also shows 'I Line 16 Column 35', 'I Insert', and 'I Modified Unix/Mac: L'.