

Assignment Solution:

Question 1. Retrieve the total number of orders placed by each user.
Display the user's name and the total number of orders they have placed.
Sort the results in descending order based on the number of orders.

```
SQL query:
SELECT U.NAME, COUNT(O.ORDER_ID) AS TOTAL_ORDERS
FROM USER_INFO U
JOIN ORDERS O ON U.ID = O.USER_ID
GROUP BY U.NAME
ORDER BY TOTAL_ORDERS DESC;
```

Output:

NAME	TOTAL_ORDERS
Rebecca Bailey	5
Patricia Scott	4
Amanda Roberts	4
Michelle Lee	4
John Doe	3
Susan Hill	3
Elizabeth King	3
Charles Morgan	3
Karen Phillips	3
Linda Miller	3
David Davis	3
Jane Smith	2
Michael Johnson	2
Emily Williams	2
Robert Brown	2
Karen Allen	2
Joseph Scott	2
Stephanie White	2
Christopher Lewis	2
William Turner	2
Matthew Cooper	2
Sarah Wilson	1
Kevin Hall	1
Jennifer Clark	1
Andrew James	1
Jessica Cook	1
Laura Turner	1
Michael Hall	1
Kimberly Green	1
Anna Turner	1
Mark Harris	1
Matthew Allen	1
Daniel Evans	1
John Smith	1

Question 2. Find the average price of menu items for each restaurant.
Display the restaurant name and the average menu item price. Sort the results in ascending order based on the restaurant name.

```
SQL query:
SELECT R.NAME, AVG(M.PRICE) AS AVG_PRICE
FROM RESTAURANT_INFO R
JOIN MENUITEMS M ON R.RESTAURANT_ID = M.RESTAURANT_ID
GROUP BY R.NAME
ORDER BY R.NAME ASC;
```

Output:

NAME	AVG_PRICE
Restaurant A	36.8
Restaurant B	37.25
Restaurant C	57.8
Restaurant D	91
Restaurant E	67.5
Restaurant F	14
Restaurant G	55.8
Restaurant H	81.6667
Restaurant I	45
Restaurant J	39
Restaurant K	73.5
Restaurant L	61.4444

Question 3. Identify the restaurant with the highest total sales (sum of order amounts). Display the restaurant name and the total sales amount.

```
SQL query:
SELECT R.NAME, SUM(O.TOTAL_AMOUNT) AS TOTAL_SALES
FROM RESTAURANT_INFO R
JOIN ORDERS O ON R.RESTAURANT_ID = O.RESTAURANT_ID
GROUP BY R.NAME
ORDER BY TOTAL_SALES DESC
LIMIT 1;
```

Output:

NAME	TOTAL_SALES
Restaurant L	573

Question 4. Find the number of orders placed in each city. Display the city name and the number of orders. Sort the results in descending order based on the number of orders.

```
SQL query:
SELECT C.CITY_NAME, COUNT(O.ORDER_ID) AS TOTAL_ORDERS
FROM CITY C
JOIN USER_INFO U ON C.CITY_ID = U.CITY_ID
JOIN ORDERS O ON U.ID = O.USER_ID
GROUP BY C.CITY_NAME
ORDER BY TOTAL_ORDERS DESC;
```

Output:

CITY_NAME	TOTAL_ORDERS
Dhaka	23
Khulna	17
Sylhet	14
Chittagong	7
Jessore	4
Rangpur	3
Rajshahi	2
Barisal	1