ITC 5104 Database Design and SQL
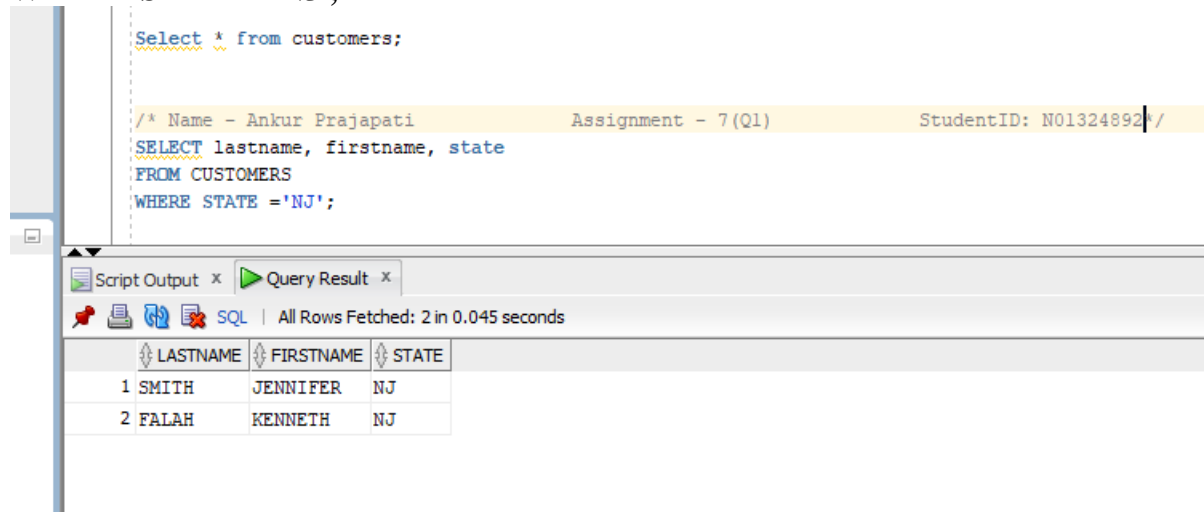
Ankur Prajapati   **Assignment 7**   **StudentID: N01324892**

To perform the following assignments, refer to the tables created in the <mark>**JLDB_Build_8.sql**</mark> script at the beginning of the chapter. Give the SQL statements and output for the following data requests:

1. Which customers live in New Jersey? List each customer's last name, first name, and state.
   SELECT lastname, firstname, state
   FROM CUSTOMERS
   WHERE STATE ='NJ';

```
Select * from customers;


/* Name - Ankur Prajapati          Assignment - 7(Q1)          StudentID: N01324892*/
SELECT lastname, firstname, state
FROM CUSTOMERS
WHERE STATE ='NJ';
```
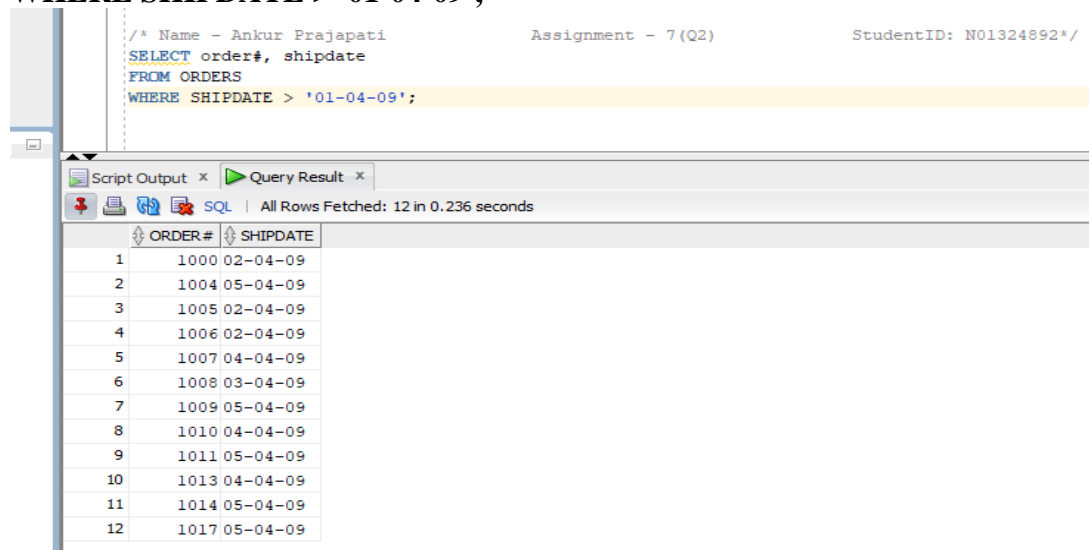
Script Output ×   Query Result ×

SQL | All Rows Fetched: 2 in 0.045 seconds

	LASTNAME	FIRSTNAME	STATE
1	SMITH	JENNIFER	NJ
2	FALAH	KENNETH	NJ

2. Which orders shipped after April 1, 2009? List each order number and the date it shipped.
   SELECT order#, shipdate
   FROM ORDERS
   WHERE SHIPDATE > '01-04-09';
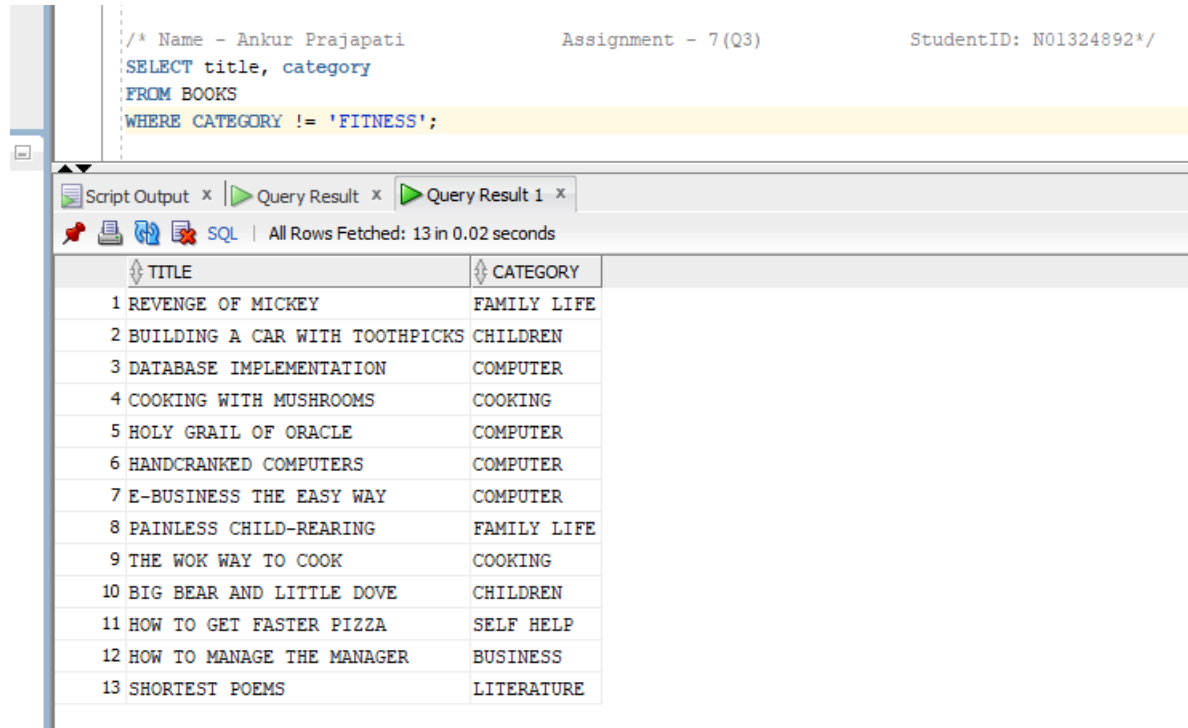
```
/* Name - Ankur Prajapati          Assignment - 7(Q2)          StudentID: N01324892*/
SELECT order#, shipdate
FROM ORDERS
WHERE SHIPDATE > '01-04-09';
```

Script Output ×   Query Result ×

SQL | All Rows Fetched: 12 in 0.236 seconds

	ORDER#	SHIPDATE
1	1000	02-04-09
2	1004	05-04-09
3	1005	02-04-09
4	1006	02-04-09
5	1007	04-04-09
6	1008	03-04-09
7	1009	05-04-09
8	1010	04-04-09
9	1011	05-04-09
10	1013	04-04-09
11	1014	05-04-09
12	1017	05-04-09

3. Which books aren't in the Fitness category? List each book title and category.
   SELECT title, category
   FROM BOOKS
   WHERE CATEGORY != 'FITNESS';

```
/* Name - Ankur Prajapati              Assignment - 7(Q3)        StudentID: N01324892*/
SELECT title, category
FROM BOOKS
WHERE CATEGORY != 'FITNESS';
```

Script Output × | Query Result × | Query Result 1 ×

SQL | All Rows Fetched: 13 in 0.02 seconds

	TITLE	CATEGORY
1	REVENGE OF MICKEY	FAMILY LIFE
2	BUILDING A CAR WITH TOOTHPICKS	CHILDREN
3	DATABASE IMPLEMENTATION	COMPUTER
4	COOKING WITH MUSHROOMS	COOKING
5	HOLY GRAIL OF ORACLE	COMPUTER
6	HANDCRANKED COMPUTERS	COMPUTER
7	E-BUSINESS THE EASY WAY	COMPUTER
8	PAINLESS CHILD-REARING	FAMILY LIFE
9	THE WOK WAY TO COOK	COOKING
10	BIG BEAR AND LITTLE DOVE	CHILDREN
11	HOW TO GET FASTER PIZZA	SELF HELP
12	HOW TO MANAGE THE MANAGER	BUSINESS
13	SHORTEST POEMS	LITERATURE

4. Which customers live in Georgia or New Jersey? Put the results in ascending order by last name. List each customer's customer number, last name, and state. Write this query in two different ways.

   1st Way:
   SELECT customer#, lastname, firstname, state
   FROM CUSTOMERS
   WHERE STATE IN ('GA','NJ')
   ORDER BY lastname;

   2nd Way:
   SELECT customer#, lastname, firstname, state
   FROM CUSTOMERS
   WHERE STATE = 'GA' OR STATE = 'NJ'
   ORDER BY lastname;

```
/* Name – Ankur Prajapati          Assignment – 7(Q4)          StudentID: N01324892*/
SELECT customer#, lastname, firstname, state
FROM CUSTOMERS
WHERE STATE IN ('GA','NJ')
ORDER BY lastname;

SELECT customer#, lastname, firstname, state
FROM CUSTOMERS
WHERE STATE = 'GA' OR STATE = 'NJ'
ORDER BY lastname;
```

Script Output × | Query Result × | Query Result 1 ×

SQL | All Rows Fetched: 4 in 0.021 seconds

	CUSTOMER#	LASTNAME	FIRSTNAME	STATE
1	1020	FALAH	KENNETH	NJ
2	1010	LUCAS	JAKE	GA
3	1018	MONTIASA	GREG	GA
4	1019	SMITH	JENNIFER	NJ

5. Which orders were placed on or before April 1, 2009? List each order number and order date. Write this query in two different ways.
SELECT order#, orderdate
FROM ORDERS
WHERE orderdate <= '01-04-09';

SELECT order#, orderdate
FROM ORDERS
WHERE orderdate < '02-04-09';

```
/* Name – Ankur Prajapati          Assignment – 7(Q5)          StudentID: N01324892*/
SELECT order#, orderdate
FROM ORDERS
WHERE orderdate <= '01-04-09';

SELECT order#, orderdate
FROM ORDERS
WHERE orderdate < '02-04-09';
```
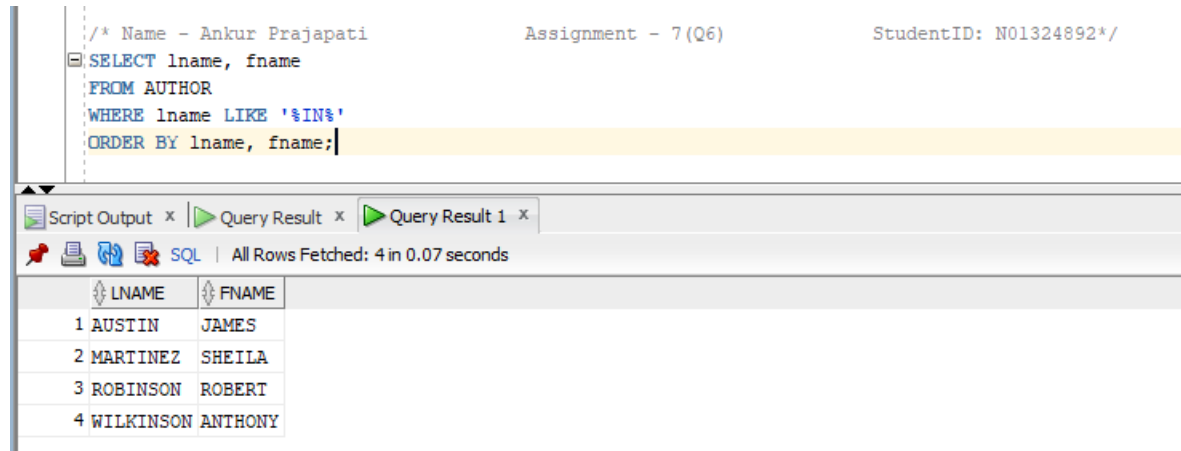
Script Output × | Query Result × | Query Result 1 ×

SQL | All Rows Fetched: 7 in 0.108 seconds

	ORDER#	ORDERDATE
1	1000	31-03-09
2	1001	31-03-09
3	1002	31-03-09
4	1003	01-04-09
5	1004	01-04-09
6	1005	01-04-09
7	1006	01-04-09

6. List all authors whose last name contains the letter pattern "IN." Put the results in order of last name, then first name. List each author's last name and first name.
   SELECT lname, fname
   FROM AUTHOR
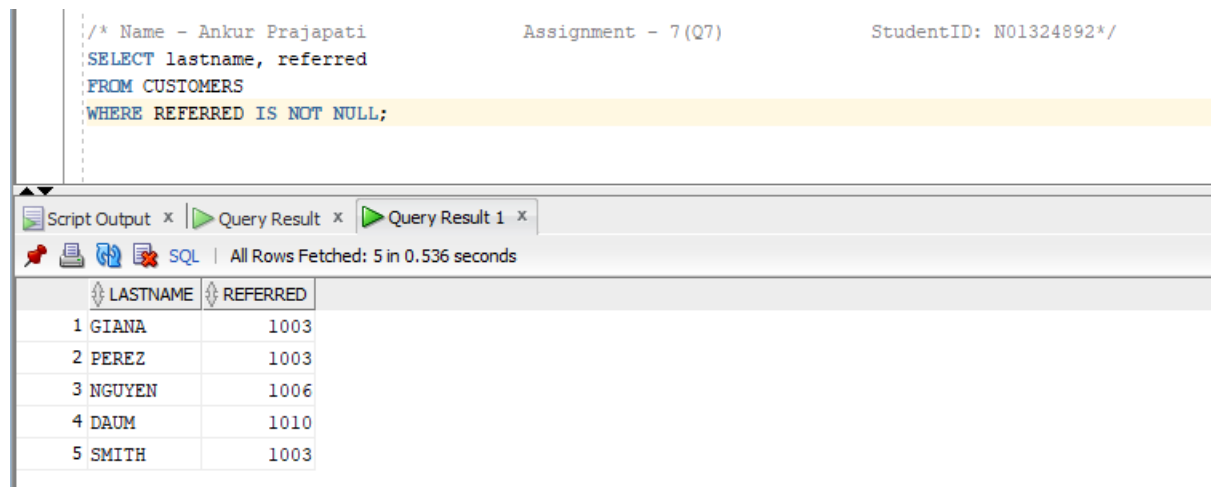   **WHERE lname LIKE '%IN%'**
   ORDER BY lname, fname;

```
/* Name - Ankur Prajapati          Assignment - 7(Q6)          StudentID: N01324892*/
SELECT lname, fname
FROM AUTHOR
WHERE lname LIKE '%IN%'
ORDER BY lname, fname;
```

Script Output × Query Result × Query Result 1 ×

SQL | All Rows Fetched: 4 in 0.07 seconds

	LNAME	FNAME
1	AUSTIN	JAMES
2	MARTINEZ	SHEILA
3	ROBINSON	ROBERT
4	WILKINSON	ANTHONY

7. List all customers who were referred to the bookstore by another customer. List each customer's last name and the number of the customer who made the referral.
   SELECT lastname, referred
   FROM CUSTOMERS
   WHERE REFERRED IS NOT NULL;

```
/* Name - Ankur Prajapati          Assignment - 7(Q7)          StudentID: N01324892*/
SELECT lastname, referred
FROM CUSTOMERS
WHERE REFERRED IS NOT NULL;
```

Script Output × Query Result × Query Result 1 ×

SQL | All Rows Fetched: 5 in 0.536 seconds

	LASTNAME	REFERRED
1	GIANA	1003
2	PEREZ	1003
3	NGUYEN	1006
4	DAUM	1010
5	SMITH	1003

8. Display the book title and category for all books in the Children and Cooking categories. Create three different queries to accomplish this task:

   a) a search pattern operation,
   b) a logical operator, and
   c) another operator not used in a or b.

SELECT title, category   /* Comparison Operators*/
FROM BOOKS
WHERE CATEGORY IN ('CHILDREN','COOKING');

SELECT title, category   /*Logical Operators*/
FROM BOOKS
WHERE CATEGORY = 'CHILDREN' OR CATEGORY = 'COOKING';

SELECT title, category
FROM BOOKS
WHERE CATEGORY LIKE 'C%N%';

```
/* Name - Ankur Prajapati          Assignment - 7(Q8) - Comparison operators          StudentID: N01324892*/
SELECT title, category
FROM BOOKS
WHERE CATEGORY IN ('CHILDREN','COOKING');

SELECT title, category                    /*Logical Operators*/
FROM BOOKS
WHERE CATEGORY = 'CHILDREN' OR CATEGORY = 'COOKING';

SELECT title, category                    /* Other Operators */
FROM BOOKS
WHERE CATEGORY LIKE 'C%N%';
```

Script Output × |▷ Query Result × ▷ Query Result 1 ×

🖨 🔁 📇 SQL | All Rows Fetched: 4 in 0.323 seconds

	TITLE	CATEGORY
1	BUILDING A CAR WITH TOOTHPICKS	CHILDREN
2	COOKING WITH MUSHROOMS	COOKING
3	THE WOK WAY TO COOK	COOKING
4	BIG BEAR AND LITTLE DOVE	CHILDREN

9. Use a search pattern to find any book title with "A" for the second letter and "N" for the fourth letter. List each book's ISBN and title. Sort the list by title in descending order.
   SELECT ISBN, title
   FROM BOOKS
   WHERE title LIKE '_A_N%'
   ORDER BY title DESC;

```
/* Name - Ankur Prajapati          Assignment - 7(Q9)          StudentID: N01324892*/
SELECT ISBN, title
FROM BOOKS
WHERE title LIKE '_A_N%'
ORDER BY title DESC;
```

Script Output × |▷ Query Result × ▷ Query Result 1 ×

📌 🖨 🔁 📇 SQL | All Rows Fetched: 1 in 0.36 seconds

	ISBN	TITLE
1	2491748320	PAINLESS CHILD-REARING

10. List the title and publish date of any computer book published in 2005. Perform the task of searching for the publish date by using three different methods:

    a) a range operator,
    b) a logical operator, and
    c) a search pattern operation.

    SELECT title, pubdate   **/* Logical Operator*/**
    FROM BOOKS
    WHERE CATEGORY = 'COMPUTER' AND PUBDATE LIKE '%05';

    SELECT title, pubdate   **/* Comparison Operator*/**
    FROM BOOKS
    WHERE (PUBDATE BETWEEN '01-01-05' AND '31-12-05') AND CATEGORY = 'COMPUTER';

    SELECT title, pubdate   **/* Search Pattern Operation*/**
    FROM BOOKS
    WHERE CATEGORY LIKE 'COM%' AND PUBDATE LIKE '%05';

```
/* Name - Ankur Prajapati            Assignment - 7(Q10)            StudentID: N01324892*/
SELECT title, pubdate
FROM BOOKS
WHERE (PUBDATE BETWEEN '01-01-05' AND '31-12-05') AND CATEGORY = 'COMPUTER';

SELECT title, pubdate
FROM BOOKS
WHERE CATEGORY = 'COMPUTER' AND PUBDATE LIKE '%05';

SELECT title, pubdate
FROM BOOKS
WHERE CATEGORY LIKE 'COM%' AND PUBDATE LIKE '%05';
```

Script Output × | Query Result × | Query Result 1 ×

SQL | All Rows Fetched: 2 in 0.015 seconds

	TITLE	PUBDATE
1	HOLY GRAIL OF ORACLE	31-12-05
2	HANDCRANKED COMPUTERS	21-01-05