Aim: To apply different SQL clauses such as LIKE, AND, BETWEEN, NOT BETWEEN, IN & NOT IN on a created database.

Objective: To use these clauses certain conditions.

To use these clauses to filter data based on

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	BETWEEN, NOT BETWEEN, IN & NOT IN on a
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Objective:	To use these clauses to filter data Based on
2.	certain conditions.
3) = 	
DB Setup!	Creating a table to store information about
<u> </u>	various books. The table will have the following
1	COULTINGS , STATE OF
	1) Rook ID: This will be the unique identifier for each book (Primary key)
	each book (Primary Key)
	ii) Title: The title of the book.
a' -u	
1 A	iii) Author: The author of the book.
	And the second and th
1	iv Publication Year. The year book was published.
	V) Price: The mkt price of the book.
SQL rode	i) (reating the books table: The SQL query used to
Explanation	nicreate the books table is as follows:
	Bock ID is an integer column, & It is set as
	the primary key, which ensures that each book will
	have a unique identifier

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	Title & author are text columns that will store the bonk's title & author name
	Publicution/eur is in integer column used to share
	& store the year the book was published.
	Price is the decimal column to store the price of
	the book
	N.
Inserting the	The data is inserted into the broks table as:
sample data:	INSERT INTO Books (BookID, Title Author,
	INSERT INTO Books (BookID, Title Author, PublicationYear, Price) VALUES
10.00 mg	VALUES
	1 The Great Gatsby F. Scott Fitzgerald 1925 10-49)
E.	(2 1984 beorge Cruell 1949, 8.99)
7	(3 Tokill a modanabira Hosper lee' 1960, 17.99)
10 A T	(4. The catcher in the Rye, J.D. Salinger, 1851 6-49)
Aug.	(5 Moby Dick, Hermen Merville, 1851, 12.49)
<i>f</i> '	(6 Pride & Projudice, Tane Auston 1813, 9.99)
- I	(6) male of myudice, numerical 1869 14.99)
	(7 than & Peace , 1 pb Tolston 1869 14.99)
	(8) Brave new world, Aldous Huxley 1932, 11.49).
ab	
Clauses with	i) ITKE Clause: The "like" claum is und to
SQL Queries 1	search for a specified pattern in a column. The
	percentage symbol (1.) is used as a mildiard to
	represent any sequence of Churatters.
	Duery: Find books whose title contains "the word
	SELECT * FROM BOOKS WHERE FIHE LIKE 1. Thet.
And The Control of th	44.400

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	ii) AND Clause: The 'AND' clause is used to combine
- Ap-	multiple conditions. All conditions specified must be
	trelle for a record to be returned
	Query: Find broks published after 1900 and priced above \$10
	DETECT FROM Books WHERE Publication from BETWEEN
	1900 AND 1950
	SFIECT FROM * Books WHERE Publicution/evie 71900
	AND Price > 10;
	iii) Retween clause: The "BETWEEN" clause is used to
	filter results within 9 specified my range, inclusive of
estes to	the boundnes
, d	Query: Find books Published between the years 1900
	8 1950.
	SFIECT * FROM Books WHERE Publication Year BETWEEN
	1900 & 19 AND 1950;
	V) NOT BETWEEN Haun in used to execute recom
	that fall within a sprified mage.
	very: Find books whose publication year is not in
	etween 1800 and 1900.
	ELECT * FROM BOOKS WHERE PublicationYear NOT
	BETWEEN 1800 AND 1900;
	TEL MARKETTE
N/	IN Clause: Allows to sperify a list of values
Ito	search for . It returns mords where the column

water county at a man and the second and the second and the second and the second at t of your work in the second will be a second of the second weeks a week with with with which I which to which it would be the proceedings Allen of a decided limit for the contraction at love at a soul till at the life is a section and a suite water but of it for all the water A hard what will illust that the house i cel ed to the the set of all the delicate which committee index of the in the charge with which while wind Conclusion: In this practical, exploration of different ser clauses to filter data from the books table. These clauses are powerful tools for quarying Databases & can help refine search assults to meet specific criteria.

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CREATE TABLE Books (

INSERT INTO Books (BookID, Title, Author, PublicationYear, Price)
VALUES (1, 'The Great Gatsby', 'F. Scott Fitzgerald', 1925, 10.99),

WINDS WINDS WANTED

Price DECIMAL(18, 2) PublicationYear INT, Author VARCHAR(100), Title VARCHAR(100), BOOKID INT PRIMARY KEY,

N

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RUN V

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| BookID | Title
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Output
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BookID | Title
                                                                                                                                                                                                                                                                                                                                                                                                                BookID | Title
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BookID | Title
                                                                                                                                          BookID | Title
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                                                                                                                                                                                                                                                                                                                                                     1 | The Great Gatsby
                                                                                        3 | To Kill a Mockingbird | Warper Lee
                                                                                                          2 | 1984
                                                                                                                                                                                                                                                                                                                                                                    8 | Brave New World | Aldous Huxley
                                                                                                                                                                                                                                                                                                                                                                                  1 | The Great Gatsby | F. Scott Fitzgerald |
                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 | The Catcher in the Rye | J.D. Salinger
                                                                                                                                                                                         8 | Brave New World
                                                                                                                                                                                                                                      4 | The Catcher in the Rye | J.D. Salinger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 | The Great Gatsby
                                                                                                                                                                                                                                                                                       1 | The Great Gatsby
                                                                                                                                                                                                       | War and Peace
                                                                                                                                                                                                                                                     | To Kill a Mockingbird | Harper Lee
                                                                                                                                                                                                                      Noby ****
                                                                                                                                                                                                                                                                                                                                                                                                                    Author
                                                                                                                                                                            *****************************
| Gannoa Orwall
            F. Scott Fitzgerald
                                                                                                                                             Author
                                            Author
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | F. Scott Fitzgerald |
                                                                                                                             *****************************
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Author
                                                                                                                                                                                                                                                                                        F. Scott Fitzgerald
                                                                                                          George Orwell |
                                                                                                                                                                                                                                                                        George Orwell
                                                                                                                                                                                                                                                                                                                       Author
                                                                                                                                                                                            Aldous Huxley
                                                                                                                                                                                                            Leo Tolstoy
                                                                                                                                                                                                                            Herman Melville
                                                             | PublicationYear | Price |
                                                                                                                                                                                                                                                                                                                                                                                                                       | PublicationYear | Price |
                                                                                                                                                                                                                                                                                                                                          -------
                                                                                                                                                                                                                                                                                                                         | PublicationYear | Price |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PublicationYear | Price |
                                                 PublicationYear | Price |
                                                                                                               1949
                                                                                                 1960 | 7.99
                                                                                                                                                                                                                                                                                                                                                                       1932 | 11.49
                                                                                                                                                                                                                                                                                                                                                                                        1925 18.99
      TOLO ! R GG
                   1925 | 10.99
                                                                                                                  8.99
                                                                                                                                                                                                                               1851
                                                                                                                                                                                                                                                              1968
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1951 6.49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1925 | 10.99
                                                                                                                                                                                                1932 | 11.49
                                                                                                                                                                                                                1869 | 14.99
                                                                                                                                                                                                                                                                                            1925 | 10.99
                                                                                                                                                                                                                             12.49
                                                                                                                                                                                                                                                                            8.99
                                                                                                                                                                                                                                                              7.99
```

HARRE Title LIKE "XThex"; SELECT . FROM Books -- Queries using different clauses - Like clouse: Find books with "The" in the title 'Brave New World', 'Aldous Huxley', 1932, 11.49);

'War and Peace', 'Leo Tolstoy', 1869, 14.99), 'Pride and Prejudice', 'Jame Austen', 1813, 9.99), 'Hoby Dick', 'Herman Melville', 1851, 12.49),

'To xill a Mockingbird', 'Harper Lee', 1960, 7.99),
'The Catcher in the Rye', 'J.D. Salinger', 1951, 6.49),

"1984", 'George Orwell', 1949, 8.99),

-- AND clouse: Find books published after 1900 and priced above \$10

SELECT . FROM Books WHERE PublicationYear > 1980 AND Price > 18;

BETWEEN clause: Find books published between 1900 and 1950

SELECT * FROM Books

WHERE PublicationYear BETWEEN 1900 AND 1250;

WHERE PublicationYear NOT BETWEEN 1800 AND 1850; SELECT . FROM Books

- NOT BETWEEN clause: Find books published outside 1800-1900

IN clause: Find backs by George Druell or Harper Lee

SELECT * FROM Books

WHERE Author IN ('George Orwell', 'Harper Lee');

in the little common filed becomes whose orighner by mos I'm Californian

2 1 1084

::

Insert Kample data

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-- NOT BETWEEN clause: Find books published outside 1800-1900 SELECT * FROM Books
                                                                                                                                                                                                                                                                                                                                                                              SELECT * FROM Books
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SELECT * FROM Books
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VALUES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INSERT INTO Books (BookID, Title, Author, PublicationYear, Price)
WHERE PublicationYear NOT BETWEEN 1800 AND 1850;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WHERE TITLE LIKE "KThek";
                                                                                                                                                                WHERE PublicationYear BETWEEN 1900 AND 1250;
                                                                                                                                                                                                                                                                                                                             WHERE PublicationYear > 1988 AND Price > 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                          SELECT " FROM Books
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           - Queries using different clauses:
                                                                                                                                                                                                                                                - BETWEEN clause: Find books published between 1900 and 1950
                                                                                                                                                                                                                                                                                                                                                                                                              AND clause: Find books published after 1980 and priced above $10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LIKE clause: Find books with "The" in the title
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'To Kill a Mockingbird', 'Harper Lee', 1968, 7.99), 'The Catcher in the Rye', 'J.D. Salinger', 1951, 6.49),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      '1984', 'George Orwell', 1949, 8.99),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'The Great Gatsby', 'F. Scott Fitzgerald', 1925, 18.99),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'Pride and Prejudice', 'Jame Austem', 1813, 9.99),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'Moby Dick', 'Herman Melville', 1851, 12.49),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               'Brave New World', 'Aldous Huxley', 1932, 11.49);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         War and Peace', 'Leo Tolstoy', 1869, 14.99),
```

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3 | To Kill a Mockingbird | Harper Lee

George Onwell

1949 1969 7.99 ----

8.99

BookID | Title

Author

PublicationYear | Price

1 | The Great Gatsby

F. Scott Fitzgerald

8.99 18.99

7.99

1984

BookID | Title

Author

| PublicationYear | Price |

Aldous Huxley

8 | Brave New World

War and Peace

Moby ****

| The Catcher in the Rye | J.D. Salinger

Herman Melville Led Tolstoy

1869 1851 1951 1960

14.99 12.49 6.49

7.99

1932 | 11.49

To Kill a Mockingbird

Harper Lee

George Orwell F. Scott Fitzgerald

1949

8.99

10.99

49 48

SELECT * FROM Books

WHERE Author NOT IN ('George Orwell', 'Harper Lee');

-- NOT IN clause: Find books whose author is neither 'George Orwell' nor 'Harper Lee'

8 | Brave New World

Aldous Huxley leo Tolstoy

War and Peace Pride and Prejudice

+-------------

WHERE Author IN ('George Orwell', 'Harper Lee');

- In clause: Find books by George Orwell or Harper Lee

BookID | Title

1 | The Great Gatsby

The Catcher in the Rye

J.D. Salinger F. Scott Fitzgerald

Dane Austen Herman Melville

1869 1813 1851 1951

14.99

9.99 12.49 6.49

1932 | 11.49

Noby ****

6 | Pride and Prejudic 5 | Moby *****

To Kill a Mockingbird

Harper Lee George Orwell

Brave New World War and Peace

Author

PublicationYear | Price |

1925 | 10.99

Aldous Huxley

Leo Tolstoy Jane Austen Herman Melville

1869 1813 1851 1960 1949 1925

14.99 9.99 12.49

1932 | 11.49

-- NOT LIKE clause: Find books whose author is not J.D. Salinger

SELECT * FROM Books

SELECT * FROM Books

WHERE Author NOT LIKE 'J.D. Salinger';



1 | The Great Gatsby

1984











	Value matches only any of the values in the list. alway: Find books written by George Orwell are Horper lee SFIFT * FROM Books WHFRE Author IN (George orwell, Harper lee');
	VI) NOT IN Clause: 1's used to exclude records Where the column value matches any value in 9 Specified 1ist.
	Query: Find Rooks Whose Author is neithe teorge Orwell ar Harper lee
	SFIELT FROM * Books WHERE Author NOT IN ('George
	Vii/NOT LIKE (lause: is used to exclude where seconds where rolumn value matches a specific pattern author is not ID Salinger.
	SFIELT * FROM Books WHERE ANTHON NOT LIKE 'JD Salinger';
	In this practical, exploration of different SQL clauses to filter data from the books table.
	These clauses are powerful tools for queryling Databases & can help refine search results to meet specific criteria. 24/4/25
HALL THE THE	

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