

1. Create a database named library and a table named books with the following columns:

- **id (INT, Primary Key, Auto Increment)**
- **title (VARCHAR(255))**
- **author (VARCHAR(100))**
- **year (YEAR)**
- **genre (VARCHAR(100))**

create database library;

use library;

create table books(id int not null unique auto_increment,

title varchar(100),

author varchar(100),

year year,

genre varchar(100));

2. Insert the following book records into the books table:

- **"The Great Gatsby", "F. Scott Fitzgerald", 1925, "Fiction"**
- **"Pride and Prejudice", "Jane Austen", 1813, "Romance"**
- **"To Kill a Mockingbird", "Harper Lee", 1960, "Fiction"**
- **"1984", "George Orwell", 1949, "Dystopian"**
- **"Moby Dick", "Herman Melville", 1851, "Adventure"**

insert into books(title,author,year,genre)

values("The Great Gatsby", "F. Scott Fitzgerald", 1925, "Fiction"),

("Pride and Prejudice", "Jane Austen", 1813, "Romance"),

("To Kill a Mockingbird", "Harper Lee", 1960, "Fiction"),

("1984", "George Orwell", 1949, "Dystopian"),

("Moby Dick", "Herman Melville", 1951,"Adventure");

	id	title	author	year	genre
▶	1	The Great Gatsby	F. Scott Fitzgerald	1925	Fiction
	2	Pride and Prejudice	Jane Austen	1913	Romance
	3	To Kill a Mockingbird	Harper Lee	1960	Fiction
	4	1984	George Orwell	1949	Dystopian
	5	Moby Dick	Herman Melville	1951	Adventure
*	NULL	NULL	NULL	NULL	NULL

3. Write a query to select all books where the title starts with the letter 'T' using the LIKE operator.

SELECT * FROM books WHERE title LIKE 'T%';

	id	title	author	year	genre
▶	1	The Great Gatsby	F. Scott Fitzgerald	1925	Fiction
	3	To Kill a Mockingbird	Harper Lee	1960	Fiction
*	NULL	NULL	NULL	NULL	NULL

4. Write a query to find all books where the author's last name ends with 'son' using the LIKE operator.

SELECT * FROM books WHERE author LIKE '%son';

	id	title	author	year	genre
*	NULL	NULL	NULL	NULL	NULL

5. Write a query to find all books where the title contains the word 'and' using the LIKE operator.

SELECT * FROM books WHERE title LIKE '% and %';

	id	title	author	year	genre
▶	2	Pride and Prejudice	Jane Austen	1913	Romance
*	NULL	NULL	NULL	NULL	NULL

6. Write a query to retrieve all books where the title ends with the word 'bird' using the LIKE operator.

SELECT * FROM books WHERE title LIKE '% bird';

	id	title	author	year	genre
*	NULL	NULL	NULL	NULL	NULL

7. Write a query to find all books where the title has exactly 3 characters using the REGEXP operator.

SELECT * FROM books WHERE title REGEXP '^.{3}\$';

	id	title	author	year	genre
*	NULL	NULL	NULL	NULL	NULL

8. Write a query to select all books where the title contains a number using the REGEXP operator.

SELECT * FROM books WHERE title REGEXP '[0-9]';

	id	title	author	year	genre
▶	4	1984	George Orwell	1949	Dystopian
*	NULL	NULL	NULL	NULL	NULL

9. Write a query to retrieve all books where the author's name starts with any letter between 'A' and 'J' using the REGEXP operator.

SELECT * FROM books WHERE author REGEXP '^[A-Ja-j]';

	id	title	author	year	genre
▶	1	The Great Gatsby	F. Scott Fitzgerald	1925	Fiction
	2	Pride and Prejudice	Jane Austen	1913	Romance
	3	To Kill a Mockingbird	Harper Lee	1960	Fiction
	4	1984	George Orwell	1949	Dystopian
	5	Moby Dick	Herman Melville	1951	Adventure
*	NULL	NULL	NULL	NULL	NULL

10. Write a query to select all books where the genre is either 'Fiction' or 'Adventure' using the REGEXP operator.

SELECT * FROM books WHERE genre REGEXP '^(Fiction|Adventure)\$';

	id	title	author	year	genre
▶	1	The Great Gatsby	F. Scott Fitzgerald	1925	Fiction
	3	To Kill a Mockingbird	Harper Lee	1960	Fiction
	5	Moby Dick	Herman Melville	1951	Adventure
*	NULL	NULL	NULL	NULL	NULL

11. Write a query to find all books where the title contains at least one uppercase letter using the REGEXP operator.

```
SELECT * FROM books WHERE title REGEXP '[A-Z]';
```

	id	title	author	year	genre
▶	1	The Great Gatsby	F. Scott Fitzgerald	1925	Fiction
	2	Pride and Prejudice	Jane Austen	1913	Romance
	3	To Kill a Mockingbird	Harper Lee	1960	Fiction
	5	Moby Dick	Herman Melville	1951	Adventure
*	NULL	NULL	NULL	NULL	NULL

12. Write a query to find all books where the year of publication is between 1800 and 1950 using the LIKE operator.

```
SELECT * FROM books WHERE year LIKE '18%' OR year LIKE '1950%';
```

	id	title	author	year	genre
*	NULL	NULL	NULL	NULL	NULL

13. Write a query to retrieve all books where the author's name contains exactly two words using the REGEXP operator.

```
SELECT * FROM books WHERE author REGEXP '^[A-Za-z]+ [A-Za-z]+$';
```

	id	title	author	year	genre
▶	2	Pride and Prejudice	Jane Austen	1913	Romance
	3	To Kill a Mockingbird	Harper Lee	1960	Fiction
	4	1984	George Orwell	1949	Dystopian
	5	Moby Dick	Herman Melville	1951	Adventure
*	NULL	NULL	NULL	NULL	NULL

14. Write a query to find all books where the title starts with the letter 'P' and contains exactly two words using the REGEXP operator.

```
SELECT * FROM books WHERE title REGEXP '^[^A-Za-z0-9 ]';
```

	id	title	author	year	genre
*	NULL	NULL	NULL	NULL	NULL

15. Write a query to find all books where the title contains any special characters (e.g., '!', '@', '#', etc.) using the REGEXP operator.

```
SELECT * FROM books WHERE title REGEXP '[[:punct:]]';
```

	id	title	author	year	genre
▶	1	The Great Gatsby	F. Scott Fitzgerald	1925	Fiction
	2	Pride and Prejudice	Jane Austen	1913	Romance
	3	To Kill a Mockingbird	Harper Lee	1960	Fiction
	5	Moby Dick	Herman Melville	1951	Adventure
*	NULL	NULL	NULL	NULL	NULL