#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;

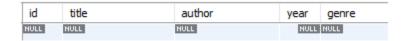use library;

create table books(

id INT Primary Key Auto_Increment,

title VARCHAR(255),

author VARCHAR(100),

year YEAR,

genre VARCHAR(100));

id	title	author	year	genre
NULL	NULL	NULL	NULL	NULL

#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",1913, "Romance"),

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

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

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

select * from books;

id	title	author	year	genre
11	The Great Gatsby	F. Scott Fitzgerald	1925	Fiction
12	Pride and Prejudice	Jane Austen	1913	Romance
13	To Kill a Mockingbird	Harper Lee	1960	Fiction
14	1984	George Orwell	1949	Dystopian
15	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
11	The Great Gatsby	F. Scott Fitzgerald	1925	Fiction
13	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.

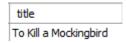select * from books where author like "%son";

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
12	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 title from books where title like "%bird";

title
To Kill a Mockingbird

#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 "___";

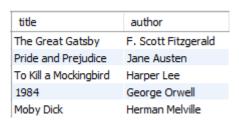| id	title	author	year	genre
NULL	NULL	NULL	NULL	NULL

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

select title from books where title regexp "[0-9]";

title
1984

#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 title from books where title regexp "___";

title	author
The Great Gatsby	F. Scott Fitzgerald
Pride and Prejudice	Jane Austen
To Kill a Mockingbird	Harper Lee
1984	George Orwell
Moby Dick	Herman Melville

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

select title from books where genre regexp "Fiction" or "Adventure";

title
The Great Gatsby
To Kill a Mockingbird

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

select title from books where title regexp "[A-Z]";

title
The Great Gatsby
Pride and Prejudice
To Kill a Mockingbird
Moby Dick

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

select title, YEAR from books where YEAR between 1800 AND 1950;

title	YEAR
The Great Gatsby	1925
Pride and Prejudice	1913
1984	1949

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

SELECT title, author FROM books WHERE author REGEXP '^[A-Z][a-z]+ [A-Z][a-z]+$';

title	author
Pride and Prejudice	Jane Austen
To Kill a Mockingbird	Harper Lee
1984	George Orwell
Moby Dick	Herman Melville

#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 title from books where title regexp "^P[a-zA-Z]* [a-zA-Z]+$";

	title

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

select title from books where title regexp '[[:punct:]]';

	title