SQL Assignment 1

Vedant Jhagadiawala
Roll No: 743

August 24, 2025

Program 1: Online Bookstore Management

Query 1

Problem: Display all customers whose city name starts with 'A'.
   SQL Query:

```
SELECT * FROM Customer WHERE city LIKE 'A%';
```

Output:

customer_id	name	city
3	Aarav	Ahmedabad

Query 2

Problem: Retrieve all books whose titles contain the word "The".
   SQL Query:

```
SELECT * FROM Book WHERE title LIKE '%The%';
```

Output:

book_id	title	author	price
1	The Silent Patient	Alex Michaelides	360
3	The White Tiger	Aravind Adiga	420
6	The Shadow Lines	Amitav Ghosh	440

Query 3

Problem: Display books priced between 400 and 500.
   SQL Query:

```
SELECT * FROM Book WHERE price BETWEEN 400 AND 500;
```

Output:

book_id	title	author	price
3	The White Tiger	Aravind Adiga	420
6	The Shadow Lines	Amitav Ghosh	440

Program 2: Fitness Center Membership

Query 1

Problem: List classes that contain the word "Yoga".
SQL Query:

```
SELECT * FROM Class WHERE class_name LIKE '%Yoga%';
```

Output:

class_id	class_name	trainer_id
1	Sunrise Yoga	1

Query 2

Problem: Display all members who joined after 1 March 2023.
SQL Query:

```
SELECT * FROM Member WHERE join_date > '2023-03-01';
```

Output:

member_id	name	join_date	city
2	Divy	2023-03-15	Jaipur
3	Vedant	2023-04-05	Pune
4	Bhaumik	2023-05-10	Surat

Query 3

Problem: Display trainers whose specialization is exactly 4 characters long.
SQL Query:

```
SELECT * FROM Trainer WHERE LENGTH(specialization) = 4;
```

Output:

trainer_id	name	specialization
1	Yaksh	Yoga

Program 3: Movie Rental

Query 1

Problem: Find customers whose name contains "Shah".
SQL Query:

```
SELECT * FROM Customer WHERE name LIKE '%Shah';
```

Output: (No rows returned)

Query 2

Problem: Display movies released between 2010 and 2020.
SQL Query:

```
SELECT * FROM Movie WHERE release_year BETWEEN 2010 AND 2020;
```

Output:

movie_id	title	genre	release_year
2	Inception	Sci-Fi	2010
3	Drishyam	Thriller	2015
5	Interstellar	Sci-Fi	2014

Query 3

Problem: Retrieve all movies with "Sci-Fi" genre.
SQL Query:

```
SELECT * FROM Movie WHERE genre LIKE '%Sci-Fi%';
```

Output:

movie_id	title	genre	release_year
2	Inception	Sci-Fi	2010
5	Interstellar	Sci-Fi	2014