EXPERIMENT 1

AIM –

Create Author and Book tables and insert sample records into author and book tables and then retrieve book titles along with author information using Inner Join.

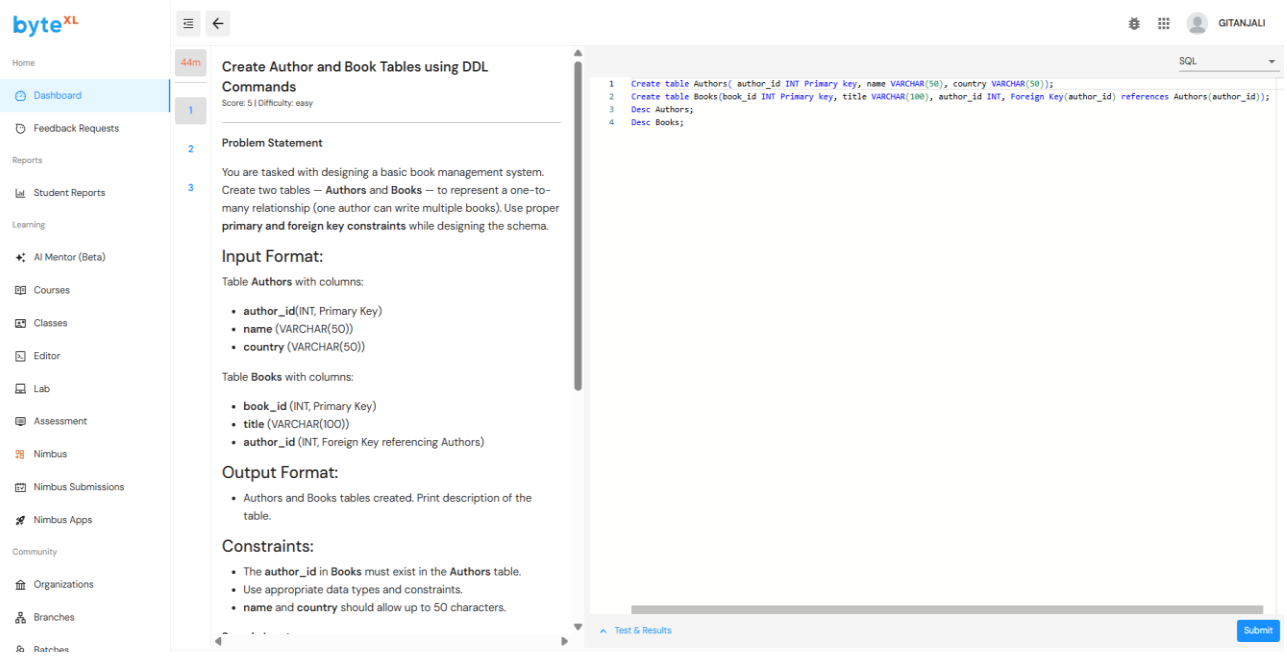
QUERY 1 –

Create table Authors(author_id INT Primary Key, name VARCHAR(50), country VARCHAR(50));

Create table Books(book_id INT Primary Key, title VARCHAR(100), author_id INT, Foreign Key (author_id) references Authors(author_id));

Desc Authors;

Desc Books;



Output:

```
+-----------+-------------+------+-----+---------+-------+
| Field     | Type        | Null | Key | Default | Extra |
+-----------+-------------+------+-----+---------+-------+
| author_id | int         | NO   | PRI | NULL    |       |
| name      | varchar(50) | YES  |     | NULL    |       |
| country   | varchar(50) | YES  |     | NULL    |       |
+-----------+-------------+------+-----+---------+-------+
+-----------+--------------+------+-----+---------+-------+
| Field     | Type         | Null | Key | Default | Extra |
+-----------+--------------+------+-----+---------+-------+
| book_id   | int          | NO   | PRI | NULL    |       |
| title     | varchar(100) | YES  |     | NULL    |       |
| author_id | int          | YES  | MUL | NULL    |       |
+-----------+--------------+------+-----+---------+-------+
```

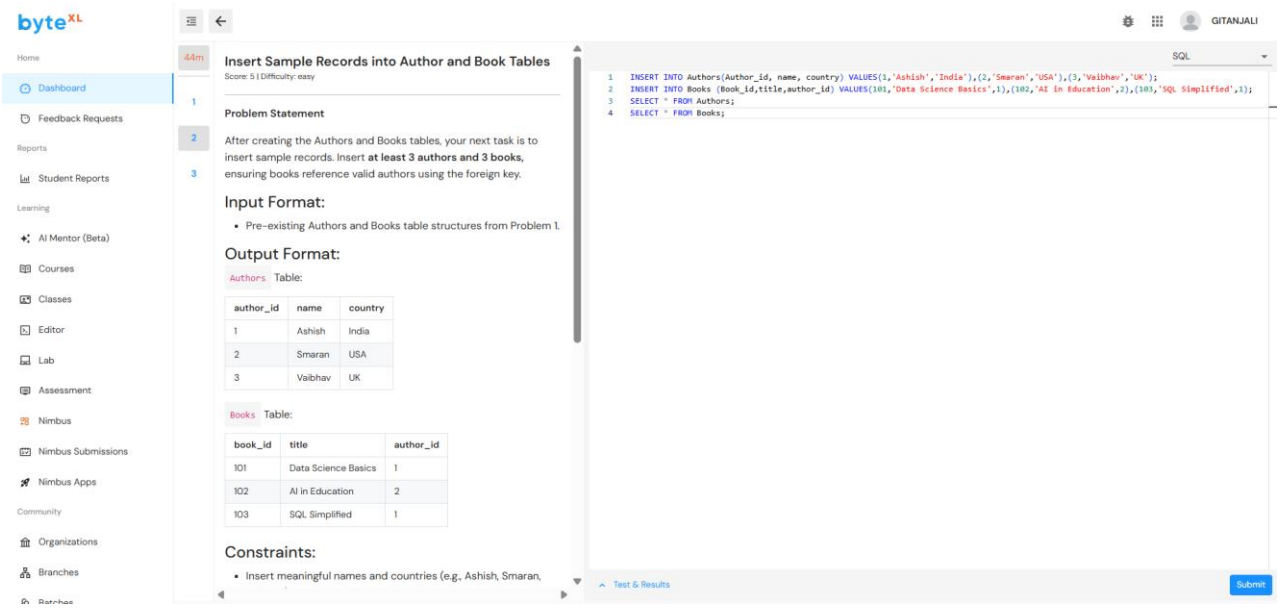
132 ms

QUERY 2 –

```
INSERT INTO Authors (Author_id, name, country)
VALUES
(1, 'Ashish', 'India'),
(2, 'Smaran', 'USA'),
(3, 'Vaibhav', 'UK');

-- Insert into Books table (match book_id values exactly)
INSERT INTO Books (Book_id, title, author_id) VALUES
(101, 'Data Science Basics', 1),
(102, 'AI in Education', 2),
(103, 'SQL Simplified', 1);

-- Display the tables
SELECT * FROM Authors;
SELECT * FROM Books;
```



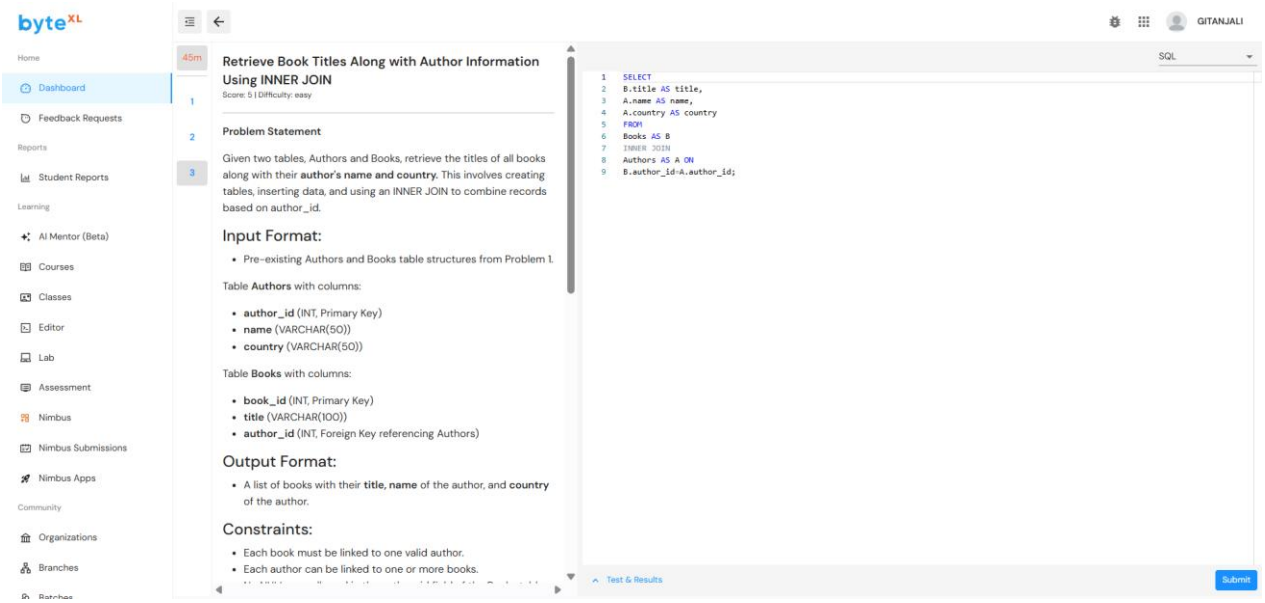
Output:

```
+-----------+---------+---------+
| author_id | name    | country |
+-----------+---------+---------+
|         1 | Ashish  | India   |
|         2 | Smaran  | USA     |
|         3 | Vaibhav | UK      |
+-----------+---------+---------+
+---------+----------------------+-----------+
| book_id | title                | author_id |
+---------+----------------------+-----------+
|     101 | Data Science Basics  |         1 |
|     102 | AI in Education      |         2 |
|     103 | SQL Simplified       |         1 |
+---------+----------------------+-----------+
```

162 ms

QUERY 3 –

```
SELECT
    B.title AS title,
        A.name AS name,
            A.country AS country
            FROM
                Books AS B
                INNER JOIN
                    Authors AS A ON B.author_id = A.author_id;
```



Output:

```
+---------------------+--------+---------+
| title               | name   | country |
+---------------------+--------+---------+
| Data Science Basics | Ashish | India   |
| AI in Education     | Smaran | USA     |
| SQL Simplified      | Ashish | India   |
+---------------------+--------+---------+
```

179 ms