Experiment- 1.1

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1. **Aim:**
   To design and implement a relational database that stores information about authors and their books, and to demonstrate data retrieval using SQL queries with relational joins.

2. **Objective:**
   Database Creation – Create structured tables (AUTHORS and BOOKS) with appropriate data types and constraints.
   Relationship Establishment – Implement a foreign key relationship between authors and books to ensure referential integrity.
   Data Insertion – Populate the database with sample data representing authors and their respective books.
   Data Retrieval – Execute a query using INNER JOIN to combine data from multiple tables, displaying book details alongside author information.
   Data Organization – Present the results in a clear and structured format to support analysis and reporting.

3. **DBMS script and output:**

```
--CREATE DATABASE githubUpload;
--use githubUpload;


CREATE TABLE AUTHORS (
  AUTH_ID INT PRIMARY KEY,
  AUTH_NAME VARCHAR(50),
  COUNTRY VARCHAR(100)
);


CREATE TABLE BOOKS (
  BOOK_ID INT PRIMARY KEY,
  BOOK_NAME VARCHAR(100),
```

```
  AUTH_ID INT,
  PUBLISH_YEAR INT,
  CONSTRAINT fk_books_authors FOREIGN KEY (AUTH_ID) REFERENCES
AUTHORS(AUTH_ID)
);


INSERT INTO AUTHORS (AUTH_ID, AUTH_NAME, COUNTRY) VALUES
(1, 'Masashi Kishimoto', 'Japan'),
(2, 'J.K. Rowling', 'England'),
(3, 'Tsugumi Ohba', 'Japan');


INSERT INTO BOOKS (BOOK_ID, BOOK_NAME, AUTH_ID,
PUBLISH_YEAR) VALUES
(1001, 'Naruto Vol. 1', 1, 1999),
(1002, 'Naruto Vol. 2', 1, 2000),
(1003, 'Harry Potter and the Sorcerer"s Stone', 2, 1997),
(1004, 'Harry Potter and the Chamber of Secrets', 2, 1998),
(1005, 'Death Note Vol. 1', 3, 2003),
(1006, 'Death Note Vol. 2', 3, 2004);


SELECT
  B.BOOK_ID,
  B.BOOK_NAME,
  B.PUBLISH_YEAR,
  A.AUTH_NAME,
  A.COUNTRY
FROM AUTHORS A
INNER JOIN BOOKS B ON A.AUTH_ID = B.AUTH_ID;
```

Results | Messages

	BOOK_ID	BOOK_NAME	PUBLISH_YEAR	AUTH_NAME	COUNTRY
1	1001	Naruto Vol. 1	1999	Masashi Kishimoto	Japan
2	1002	Naruto Vol. 2	2000	Masashi Kishimoto	Japan
3	1003	Harry Potter and the Sorcerer's Stone	1997	J.K. Rowling	England
4	1004	Harry Potter and the Chamber of Secrets	1998	J.K. Rowling	England
5	1005	Death Note Vol. 1	2003	Tsugumi Ohba	Japan
6	1006	Death Note Vol. 2	2004	Tsugumi Ohba	Japan