



# DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Discover. Learn. Empower.

## Experiment-1

**Student Name:** Himanshu Gupta

**Branch:** CSE

**Semester:** 5th

**Subject Name:** ADBMS

**UID:** 23BCS10889

**Section/Group:** KRG-2B

**Date of Performance:** 28-07-25

**Subject Code:** 23CSP-333

### 1. AIM:

a.) Author-Book Relationship Using Joins and Basic SQL Operations.

Patient

- Design two tables — one for storing author details and the other for book details.
- Ensure a foreign key relationship from the book to its respective author.
- Insert at least three records in each table.
- Perform an INNER JOIN to link each book with its author using the common author ID.
- Select the book title, author name, and author's country.

### 2. OBJECTIVE:

- To understand how to use JOINS in SQL.
- To understand the basic SQL Queries.
- To learn how to create Foreign keys in SQL.

### 3. TABLES:

author_id	name	country
1	Agatha Christie	United Kingdom
2	Stephen King	United States
3	Gabriel Garcia Marquez	Colombia
4	Jane Austen	United Kingdom
book_id	title	author_id
101	And Then There Were None	1
102	The Shining	2
103	One Hundred Years of Solitude	3
104	Pride and Prejudice	4
105	Murder on the Orient Express	1
106	It	2



## 4. DBMS:

```
-- Create Author table
CREATE TABLE Author (
  author_id INT PRIMARY KEY,
  name VARCHAR(100),
  country VARCHAR(100)
);

-- Create Book table
CREATE TABLE Book (
  book_id INT PRIMARY KEY,
  title VARCHAR(200),
  author_id INT,
  FOREIGN KEY (author_id) REFERENCES Author(author_id)
);

-- Insert data into Author
INSERT INTO Author (author_id, name, country) VALUES
(1, 'Agatha Christie', 'United Kingdom'),
(2, 'Stephen King', 'United States'),
(3, 'Gabriel Garcia Marquez', 'Colombia'),
(4, 'Jane Austen', 'United Kingdom');

-- Insert data into Book
INSERT INTO Book (book_id, title, author_id) VALUES
(101, 'And Then There Were None', 1),
(102, 'The Shining', 2),
(103, 'One Hundred Years of Solitude', 3),
(104, 'Pride and Prejudice', 4),
(105, 'Murder on the Orient Express', 1),
(106, 'It', 2);

Select * from Author;
Select * from Book;

-- Join the tables to get book title, author name, and country
SELECT
  Book.title AS Book_Title,
  Author.name AS Author_Name,
  Author.country AS Author_Country
FROM
  Book
INNER JOIN
  Author ON Book.author_id = Author.author_id;
```

## 5. OUTPUT:

Book_Title	Author_Name	Author_Country
And Then There Were None	Agatha Christie	United Kingdom
Murder on the Orient Express	Agatha Christie	United Kingdom
The Shining	Stephen King	United States
It	Stephen King	United States
One Hundred Years of Solitude	Gabriel Garcia Marquez	Colombia
Pride and Prejudice	Jane Austen	United Kingdom

## 6. LEARNING OUTCOMES:

- Basic SQL queries.
- JOINS in SQL.
- Implementation of Sub-Queries.