



# DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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## Experiment-1

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**Branch:** CSE

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

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**Subject Name:** ADBMS

**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.

Author_id	Name	country
1	Haruki Murakami	Japan
2	Jane Austen	United Kingdom
3	Gabriel Garcia Marquez	Colombia

book_id	Title	Author_id
1	Norwegian wood	1
2	Pride and prejudice	2
3	One hundred years of solitude	3

### 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.



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### 3. DBMS Script:

#### Query 1:

-- Create Author table

CREATE TABLE AUTHOR (

author\_id INTEGER PRIMARY KEY, -- Primary key for author\_id  
name VARCHAR(100) NOT NULL, -- Name of the author  
country VARCHAR(100) NOT NULL -- Country of the author

);

-- Create Book table

CREATE TABLE BOOK (

book\_id INTEGER PRIMARY KEY, -- Primary key for book\_id  
title VARCHAR(200) NOT NULL, -- Title of the book  
author\_id INTEGER, -- Foreign key linking to AUTHOR table  
FOREIGN KEY (author\_id) REFERENCES AUTHOR(author\_id) -- Enforcing foreign  
key relationship

);

-- Insert data into Author table

INSERT INTO AUTHOR (author\_id, name, country) VALUES  
(1, 'Haruki Murakami', 'Japan'),  
(2, 'Jane Austen', 'United Kingdom'),  
(3, 'Gabriel Garcia Marquez', 'Colombia');

-- Insert data into Book table

INSERT INTO BOOK (book\_id, title, author\_id) VALUES  
(1, 'Norwegian Wood', 1),  
(2, 'Pride and Prejudice', 2),  
(3, 'One Hundred Years of Solitude', 3);

-- Join the tables and select book title, author name, and author's country

SELECT

B.title AS Book\_Title,

A.name AS Author\_Name,

A.country AS Author\_Country

FROM



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BOOK AS B

INNER JOIN

AUTHOR AS A

ON

B.author\_id = A.author\_id;

Output:

Book_Title	Author_Name	Author_Country
Norwegian Wood	Haruki Murakami	Japan
Pride and Prejudice	Jane Austen	United Kingdom
One Hundred Years of Solitude	Gabriel Garcia Marquez	Colombia

## 4. Learning Outcomes:

- You will be able to write basic SQL queries.
- You will learn to perform JOINS in SQL.
- You will understand how to implement foreign keys.