Experiment 1-A

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Aim:

Easy-Level Problem

Problem Title: Author-Book Relationship Using Joins and Basic SQL Operations

Procedure (Step-by-Step):

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

Sample Output Description:

When the join is performed, we get a list where each book title is shown along with its author's name and their country.

Code:

```
CREATE TABLE AUTHOR(
    AUTHOR_ID INT PRIMARY KEY,
    AUTHOR_NAME VARCHAR(20),
    COUNTRY VARCHAR(20)
)

CREATE TABLE BOOK (
    BOOK_ID INT PRIMARY KEY,
    BOOK_TITLE VARCHAR(20),
    AUTHOR_ID INT  /* It is not necessary to keep the column name of foreign key and primary key same.*/
    FOREIGN KEY (AUTHOR_ID) REFERENCES AUTHOR(AUTHOR_ID)
```

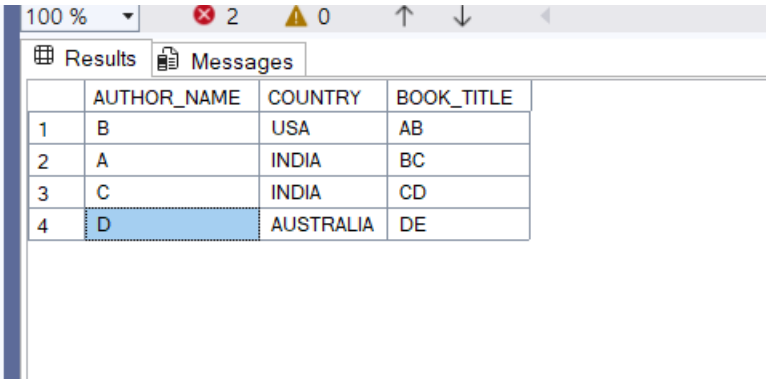
```
)

INSERT INTO AUTHOR
VALUES
(1,'A', 'INDIA'),
(2,'B', 'USA'),
(3,'C', 'INDIA'),
(4,'D', 'AUSTRALIA');

INSERT INTO BOOK
VALUES
(101,'AB', 2),
(102,'BC', 1),
(103,'CD', 3),
(104,'DE', 4);

SELECT A.AUTHOR_NAME, A.COUNTRY , B.BOOK_TITLE
FROM AUTHOR  AS A
INNER JOIN
BOOK  AS B
ON
A.AUTHOR_ID = B.AUTHOR_ID
```

Output:



	AUTHOR_NAME	COUNTRY	BOOK_TITLE
1	B	USA	AB
2	A	INDIA	BC
3	C	INDIA	CD
4	D	AUSTRALIA	DE