Day 1

Name : DHANAPAL Date : 24/7/2024

Task 1:

- 1. Create book as table with columns BookID, BookName, AuthorName, ISBN
- 2.BookID should be primary key
- 3. Alter type from NVARCHAR (100) to NVARCHAR (50)
- 4. Alter type from NVArCHAR (100) to NVARCHAR (150

Solution:

Step 1: Create Book Table in that make Book ID to Primary Key:

```
BookID INT PRIMARY KEY, --set as primary
BookName NVARCHAR(100),
AuthorName NVARCHAR(100),
ISBN NVARCHAR(100)
);
```

Step 2: Insert Some Sample values

```
-- Sample data for the Book table

INSERT INTO Book VALUES (1, 'Romeo and Juliet', 'William Shakespeare', 'R121');

Insert into Book values(2,'You can','jack','R131');

INSERT INTO Book VALUES (3, 'To Kill a Mockingbird', 'Harper Lee', 'TKM123');

INSERT INTO Book VALUES (4, 'Pride and Prejudice', 'Jane Austen', 'PP456');

INSERT INTO Book VALUES (5, 'The Great Gatsby', 'F. Scott Fitzgerald', 'GG789');
```

The values in table look like

	BookID	BookName	AuthorName	ISBN
1	1	Romeo Juliet	William Shaksphere	R121
2	2	Can We	jack	R131
3	3	To Kill a Mockingbird	Harper Lee	TKM123
4	4	Pride and Prejudice	Jane Austen	PP456
5	5	The Great Gatsby	F. Scott Fitzgerald	GG789

```
Alter table book alter column bookname Nvarchar(50)
Step 4: Alter type from NVArCHAR (100) to NVARCHAR (150)
Alter table book alter column AuthorName nvarchar(150);
Task 2:
1) Create Books Table with Bookid, book name
2) Authors table with author id, author name
3) Create a junction table for books and authors
Step 1: Create Books Table:
 EXECUTE CREATE TABLE Books (
        BookID INT PRIMARY KEY,
        BookName NVARCHAR(100)
   );
Step 2: Insert Some sample data
```

Insert into Books values(1, 'Sample1');

Insert into Books values(2,'Sample2');

The Value in table look like

	BookID	BookName
1	1	Sample1
2	2	Sample2

Step 3: Create Authors Table:

```
AuthorID INT PRIMARY KEY,
AuthorName NVARCHAR(100)
```

Step 4: Insert some sample data

```
Insert into Authors values(1, 'Author1'),(2, 'Author2');
```

The Value in table look like

	AuthorID	AuthorName
1	1	Author1
2	2	Author2

Step 5 : Create Junction Table for Books and Authors:

```
☐ CREATE TABLE BookAuthors (

BookID INT,

AuthorID INT,

PRIMARY KEY (BookID, AuthorID),

FOREIGN KEY (BookID) REFERENCES Books(BookID),

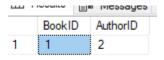
FOREIGN KEY (AuthorID) REFERENCES Authors(AuthorID)

);
```

Step 6: Insert Some data

```
insert into BookAuthors values((select BookID from Books where BookName='Sample1'), (select AuthorId from Authors where AuthorName='Author2'));
```

The data in table look like



Step 7: Make Database Diagram (This is how the junction look like):

