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--creating subject table
CREATE TABLE [Subject] (
    subjectId INT PRIMARY KEY,
    subtitle VARCHAR(20) NOT NULL
);
select * from Subject

-----Crating Book Table
Create table Book(
    bookId INT PRIMARY KEY,
    title VARCHAR(20) NOT NULL,
    price INT NOT NULL,
    volume INT,
    author VARCHAR(20) NOT NULL,
    publishDate DATE,
    subjectId INT,
    FOREIGN KEY (subjectId) REFERENCES Subject(subjectId)
);

--1.Insert 5 diff subjects in subject table

insert into subject values(1, 'Mathematics');

insert into subject values(2, 'Physics');

insert into subject values(3, 'Chemistry');

insert into subject values(4, 'Biology');

insert into subject values(5, 'Computer Science');

--2.Insert 15 diff books of 5 subjects in books table

insert into book values(1, 'GoldName', 40, 1, 'Suchitha', '2023-03-01', 1);

insert into book values(2, 'Friendship', 45, 2, 'Thoshitha', '2023-03-15', 1);

insert into book values(3, 'Dance', 55, 1, 'Pandu', '2023-04-01', 1);

insert into book values (4, 'Peace', 60, 1, 'Thulasi', '2023-05-01', 2);

insert into book values(5, 'Electromagnetism', 65, 1, 'Sai', '2023-05-10', 2);

insert into book values(6, 'Quantum Physics', 70, 2, 'Gayathri', '2023-06-01', 2);

insert into book values(7, 'Organic Chemistry', 50, 1, 'Ganesh', '2023-06-15', 3);

```

```
insert into book values(8, 'Inorganic Chemistry', 55, 1, 'Reshma', '2023-07-01', 3);
```

```
insert into book values(9, 'Physical Chemistry', 60, 2, 'Janu', '2023-07-15', 3);
```

```
insert into book values (10, 'Cell Biology', 45, 1, 'Dilly', '2023-08-01', 4);
```

```
insert into book values(11, 'Genetics', 50, 1, 'Lavanya', '2023-08-15', 4);
```

```
insert into book values (12, 'Evolutionary Biology', 55, 2, 'Rohit', '2023-09-01', 4);
```

```
insert into book values(13, 'Introduction to Programming', 40, 1, 'Rakesh', '2023-09-15', 5);
```

```
insert into book values(14, 'Data Structures and Algorithms', 50, 1, 'Sushma', '2023-10-01', 5);
```

```
insert into book values(15, 'Database Management Systems', 60, 2, 'Ram', '2023-10-15', 5);
```

```
select * from Book
```

```
-- 3. Write a query to retrieve the book and its subject details using inner join.
```

```
select  
b.bookId, b.title, b.volume, b.subjectId, b.price, b.author, b.publishDate, s.subtitle  
from [Subject] as s  
inner join Book as b on s.subjectId=b.subjectId
```

```
--4. Write a query to retrieve the books list published in a given specific date interval
```

```
select bookId, title, price, volume, author, publishDate, subjectId from  
Book where  
publishDate BETWEEN '2023-01-01' AND '2023-06-30';
```

```
--5. Write a query to retrieve the number of books referred by each author
```

```
select author, COUNT(*) AS numberOfBooks from Book group by author;
```

```
--6. Write a query to retrieve the number of books referred by each subject
```

```
select s.subtitle AS subject, COUNT(b.bookId) AS numberOfBooks from Book  
b JOIN Subject s ON b.subjectId = s.subjectId  
group by s.subtitle;
```

--7. Write a query to retrieve the number of books published by the year 2000

```
select COUNT(*) AS numberOfBooks from Book where Year(publishDate) = 2000;
```

-- 8. Write a query to update price and volume of a book using bookId.

```
update Book set price = 55, volume = 3 where bookId = 1;
```

-- 9. Write a query to update price of English subject books 10%

```
update Book set price = price * 1.10 where subjectId = (select subjectId from Subject where subtitle = 'Physics');
```

--10. Write a query to delete a book using bookId

```
delete from Book where bookId = 12;
```

--13. Write a query to retrieve the min price of book details.

```
select bookId, title, price, volume, author, publishDate, subjectId from Book where price = (select MIN(price) from Book);
```

--15. Write a query to count the no of books of subject maths.

```
select COUNT(*) AS numberOfBooks from Book b JOIN Subject s on b.subjectId = s.subjectId where s.subtitle = 'Mathematics';
```

--16. Write a query to display books of subject Physics, Mathematics and Computer science.

```
select b.bookId, b.title, b.price, b.volume, b.author, b.publishDate, s.subtitle as subject from Book b JOIN Subject s on b.subjectId = s.subjectId where s.subtitle IN ('Physics', 'Mathematics', 'Computer Science');
```