

EXERCISE 2

Date: 18-07-2025

Q1. Create a table books with a attributes book no, title, publication, author, price, quantity, edition.

Name	Type
-----	-----
BOOKNO	INT (3)
TITLE	VARCHAR (25)
PUBLICATION	VARCHAR (25)
AUTHOR	VARCHAR (25)
PRICE	DECIMAL (6,2)
QUANTITY	INT (3)
EDITION	INT (2)

1. Implement the above schema enforcing primary key, check constraints and foreign key Constraints.
2. Insert 5 records into the table book.
3. Show the list of titles with their authors.
4. List various authors for the book title 'database system'.
5. Show the authors details for the table books.
6. Select the list of book details whose price is greater than 800.
7. List the details of books which have more than 15 copies in the order of price.
8. Display the list of books published by the author 'Silberschatz' with the publication 'TATA'.
9. List the names of the books that consists of 'database concepts'.

Q2. Create a table called EMP with the following structure.

Name	Type
-----	-----
EMPNO	INT (6)
ENAME	VARCHAR2(20)
JOB	VARCHAR2(10)
DEPT	VARCHAR2(10)
DEPTNO	INT (3)
SAL	INT (7,2)

1. Implement the above schema enforcing primary key, check constraints and foreign key Constraints.
2. Insert around 5 records in each of the tables
3. Display all the details of the records whose employee name starts with 'A'.
4. Display all the details of the records whose employee name does not start with 'A'.
5. Display the rows whose salary ranges from 15000 to 30000.
6. Calculate the total and average salary amount of the emp table.
7. Count the total records in the emp table.
8. Determine the max and min salary and rename the column as max_salary and min_salary.

9. What is the difference between maximum and minimum salaries of employees in the organization?
10. Find how many job titles are available in an employee table.
11. Display all employee names and salary whose salary is greater than the minimum salary of the company and job title starts with 'M'.
12. Find details of an employee earning highest salary.
13. Find all details of Arjun, Solomon and Arun employee.
14. Find the number of employees, department wise.
15. Extract a substring from the Employee name in a column (start at position 2, extract t characters).
16. Extract a substring from the Employee name in a column (start from the end, at position - 5, extract t characters).