EXERCISE 2

Date: 07-09-2020

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 (100)
PRICE	DECIMAL (6,2)
QUANTITY	INT (3)
EDITION	INT (2)

1. Implement the above schema enforcing primary key, check constraints for quantity less than 100.
2. Insert the following records into the table books.

BookNo	Title	Publication	Author	Price	Quantity	Edition
1	Fundamentals of Database System	Pearson	Elmasri, Navathe	800	25	7
2	Database System Concepts	TATA McGraw-Hill Higher Education	Silberschatz, Korth, Sudharshan	750	15	7
3	Database Management System	TATA McGraw Hill	Raghurama Krishnan, Johannes Gehrke	590	10	3
4	Datastructures and Algorithm	Pearson	H. Cormen	1080	5	6
5	Operating system concepts	Wiley	Silberschatz, Galvin, Gagne	640	8	6
6	Modern Operating System	Prentice Hall India	Tanenbaum	890	23	2
7	Computer Networks	PHI	Kurose, Ross	390	102	6

3. Show the list of titles with their authors.
4. List various authors for the book title ‘database system concepts’.
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 whose publication starts with ‘P’ and have atleast 4 characters.
9. Display the list of books whose publication not starts with ‘P’ and ‘T’
10. Display the list of books published by the author ‘Silberschatz’ with the publication starts with ‘TATA’.
11. List the names of the books that consists of ‘concepts’.
12. Demonstrate how you increase the price of books published by a specific publisher by 10%.

Q2. Create a table called ISSUE with the following structure

Name	Type
BOOKNO	**INT (3)**
STUDENTNO	**INT (3)**
ISSUEDATE	**DATETIME**
RETURNDATE	**DATETIME**

a. Implement the above schema enforcing primary key
b. Insert into table atleast 3 rows
c. Insert into table with issue date as current date and return date is 14 day plus the current date
d. Display the list of entries of BOOKNO issued on a particular date
e. Select the list of records in the table with RETURNDATE 3 days greater than today
f. Display the ISSUEDATE in this format September 07 2020
g. Extract Year and month from the ISSUEDATE and display it.

Q3. 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 NOT NULL constraints.
2. Add constraint for Checking DEPT should be of CSE, IT, ECE, EEE, CIVIL
3. Insert around 10 records in the tables
4. Display all the details of the records whose employee name starts with 'A'.
5. Display all the details of the records whose employee name does not start with 'A'.
6. Display the rows whose salary ranges from 15000 to 30000.
7. Create another table EMP1 with same structure as EMP without no records
8. Insert into the table EMP1 with records from EMP table whose DEPT is CSE
9. List all the employees departmentwise from EMP table
10. List all the employees Job wise if JOB is null order by DEPT
11. Display EMPNO, ENAME and DEPT . Display the department with FIRST two character if the department length is greater than 2.
12. Display the distinct job titles that are available in an employee table.
13. Find all details of Arjun, Solomon and Arun employee
14. Extract a substring from the Employee name in a column (start at position 2, extract t characters).
15. Extract a substring from the Employee name in a column (start from the end, at position -5, extract t characters).