

1.1A

Consider the following schema for a LibraryDatabase:

BOOK (Book_id, Title, Publisher_Name, Pub_Year)

BOOK_AUTHORS (Book_id, Author_Name)

PUBLISHER (Name, Address, Phone) BOOK_COPIES

(Book_id, Branch_id, No-of_Copies)

BOOK_LENDING (Book_id, Branch_id, Card_No, Date_Out, Due_Date)

LIBRARY_BRANCH (Branch_id, Branch_Name, Address)

Write SQL queries to

1. Retrieve details of all books in the library – id, title, name of publisher, authors, number of copies in each branch,etc.
2. Get the particulars of borrowers who have borrowed more than 3 books, but from Jan 2017 to Jun2017
3. Create a view of all books published on the year 2020
4. Create a view of all books and its number of copies that are currently available in the Library.

Write a trigger to print a statement “new book is inserted” when new book is inserted into the table book.

2.1B

Consider the following schema for a LibraryDatabase:

BOOK (Book_id, Title, Publisher_Name, Pub_Year)

BOOK_AUTHORS (Book_id, Author_Name)

PUBLISHER (Name, Address, Phone)

BOOK_COPIES(Book_id, Branch_id, No-of_Copies)

BOOK_LENDING (Book_id, Branch_id, Card_No, Date_Out, Due_Date)

LIBRARY_BRANCH (Branch_id, Branch_Name, Address)

Write SQL queries to

1. Retrieve details of all books in the library – id, title, name of publisher, authors, number of copies in each branch,etc.
2. Get the particulars of borrowers who have borrowed more than 5 books, but from Jan 2022 to Jun2022
3. List all the books have more than 5 copies in descending order.
4. Create a view of all books and its number of copies that are currently available in the Library.

Write a PL/SQL program to display Title, Publisher name and Publishing year using cursor.

3.2A

Consider the following schema for OrderDatabase:

SALESMAN (Salesman_id, Name, City, Commission)

CUSTOMER (Customer_id, Cust_Name, City, Grade, Salesman_id)

ORDERS (Ord_No, Purchase_Amt, Ord_Date, Customer_id, Salesman_id)

Write SQL queries to

1. Count the customers with grades above Bangalore's average.
2. Find the name and numbers of all salesmen who had more than one customer.
3. List all salesmen and indicate those who have and don't have customers in their cities.
4. Create a view that finds the salesman who has the customer with the highest order of a day.

Write a procedure to store Customer name, City and Grade.

6.4A

D. Consider the schema for CollegeDatabase:

STUDENT (USN, SName, Address, Phone, Gender)

SEMSEC (SSID, Sem, Sec)

CLASS (USN, SSID)

SUBJECT (Subcode, Title, Sem, Credits)

IAMARKS (USN, Subcode, SSID, Test1, Test2, Test3, FinalIA)

Write SQL queries to

1. List all the student details studying in fourth semester 'C' section.
2. Compute the total number of male and female students in each semester and in each section.
3. Create a view of Test1 marks of student USN '1BI15CS101' in all subjects.
4. Calculate the FinalIA (average of best two test marks) and update the corresponding table for all students.
5. Categorize students based on the following criterion: If FinalIA = 17 to 20 then CAT = 'Outstanding', If FinalIA = 12 to 16 then CAT = 'Average' If FinalIA < 12 then CAT = 'Weak'. Give these details only for 8th semester A, B, and C section students.

Write a trigger to print a statement "new student is inserted" when new student is inserted into the student table.

7.5A

E. Consider the schema for CompanyDatabase:

EMPLOYEE (SSN, Name, Address, Sex, Salary, SuperSSN, DNo)

DEPARTMENT (DNo, DName, MgrSSN, MgrStartDate)

DLOCATION (DNo,DLoc)

PROJECT (PNo, PName, PLocation,DNo)

WORKS_ON (SSN, PNo, Hours)

Write SQL queries to

1. Make a list of all project numbers for projects that involve an employee whose last name is 'Scott', either as a worker or as a manager of the department that controls the project.
2. Show the resulting salaries if every employee working on the 'IoT' project is given a 10 per cent raise.
3. Find the sum of the salaries of all employees of the 'Accounts' department, as well as the maximum salary, the minimum salary, and the average salary in this department
4. Retrieve the name of each employee who works on all the projects controlled by department number 5 (use NOT EXISTS operator).

Write a PL/SQL program to display Employee name, Salary and department number using cursor.

VIVA: Write a PL/SQL program to check whether the number is prime or not

8.6A

Create the following tables:

Student (roll-no, name, marks, category, district, state)

Student-rank(roll-no, marks, rank)

(a)Generate queries to do the following :

- (i) List all those students who have come from Tamilnadu state and secured a rank above 100.
- (ii) List the name all those students in ascending order who come from Andhra Pradesh state and belong to given category who have secured a rank above 50
- (iii) Create a view of all students with their name, category, district and rank.

Creation of insert trigger, delete trigger, update trigger practice triggers using the passenger database.

Passenger(Passport_ id INTEGER PRIMARY KEY, Name VARCHAR (50) Not NULL, Age Integer Not NULL, Sex Char, Address VARCHAR (50) Not NULL);

Write a trigger on passenger to display messages „1 Record is inserted“, „1 record is deleted“, „1 record is updated“ when insertion, deletion and updation are done on passenger respectively.

VIVA: Write a PL/SQL program to check whether the number is palindrome or not

4.3A

C. Consider the schema for MovieDatabase:

ACTOR (Act_id, Act_Name, Act_Gender)

DIRECTOR (Dir_id, Dir_Name, Dir_Phone)

MOVIES (Mov_id, Mov_Title, Mov_Year, Mov_Lang, Dir_id)

MOVIE_CAST (Act_id, Mov_id, Role)

RATING (Mov_id, Rev_Stars)

Write SQL queries to

1. List the titles of all movies directed by 'Hitchcock'.
2. Find the movie names where one or more actors acted in two or more movies.
3. List all actors who acted in a movie before 2000 and also in a movie after 2015.
4. Find the title of movies and number of stars for each movie that has at least one rating and find the highest number of stars that movie received. Sort the result by movie title.
5. Update rating of all movies directed by 'Steven Spielberg' to 5.

Write a trigger to print a statement "new movie is added" when new movie is inserted into the movie table.

VIVA: Write a PL/SQL program to check whether the number is even or odd

4.3B

C. Consider the schema for MovieDatabase:

ACTOR (Act_id, Act_Name, Act_Gender)

DIRECTOR (Dir_id, Dir_Name, Dir_Phone)

MOVIES (Mov_id, Mov_Title, Mov_Year, Mov_Lang, Dir_id)

MOVIE_CAST (Act_id, Mov_id, Role)

RATING (Mov_id, Rev_Stars)

Write SQL queries to

1. List the titles of all movies acted by the actor "Mohanlal".
2. Find the movie names where one or more actors acted in two or more movies.
3. List all directors who directed movies before 2000 and also after 2015.
4. Find the title of movies and number of stars for each movie and find the highest number of stars that movie received. Sort the result by movie title.
5. Update rating of all movies directed by 'Vineeth Sreenivasan' to 5.

Write a procedure to store Movie title, Movie year and Movie Language.

VIVA: Write a PL/SQL program to check whether the number is Armstrong or not