SQL RECORD QUESTIONS

I. PROGRAM – I : STUDENT DETAILS

Create 3 tables to store the details of student, course and department

Department (did, dname)

Course (cid, cname, sem_fee, did)

Student(roll_no,lname,fname,gender,dob,age,semester,ph_no,cid)

Provide appropriate constraints on relationship among tables.

1. Insert at least 5 records into 3 tables.
2. Select all records from each table.
3. To display student name and course information.
4. To display details of all male students.
5. Display students name who are paying below 15000 fees.
6. Display student names that start with 'C'.
7. Display name whose name's second letter is 'o'.
8. Display names whose name has 5 characters.
9. Display all course names that fee below 20000.
10. Display course details, fees between 20000 and 30000.
11. Display student details in ascending order.
12. Find total number of students.
13. Find number of female students.
14. Display details of students in Computer Department.
15. Display number of courses in each department.
16. Display number of students in each course.
17. Increase fees value by 1000 in the course table.
18. Increase fees value by 500 in BCA course.
19. Remove 107 (roll_no) from the student table.
20. Remove department details with did is D108.
21. Remove all details from the student table.
22. Remove the whole structure of student table.

II. PROGRAM –II : EMPLOYEE DETAILS

Create table employee and department with following fields

Department (dept_no,dept_name)

Employee(emp_no,lname,fname,gender,designation,salary,dob,ph_no,dept_no)

Provide appropriate constraints on relationship among tables.

1. Insert at least 5 records into 2 tables.
2. Select all the records from the table employee and department.
3. Find the information about all managers as well as clerk from employee table.
4. List employees whose salary greater than 30000.
5. Display annual salary for all employees.
6. Delete the records of employees whose belongs to dept_no d108.
7. Increase the salary of all clerks by 1000.
8. Display employee names and their departments.
9. Display employee details who are working in department with dept_no d1001.
10. Find the sum, minimum, maximum and average salary of all employees.
11. For each department, retrieve the department number, the number of employees in each department and their average salary.
12. Count the number of distinct salary values in the database.
13. Display the total number of employees.
14. Display the average salary of employees in each department having average salary greater than 25000.
15. Remove department ‘sales’ from the department table.
16. Display employee names in descending order.
17. Add a new column DOJ (date of joining) to the employee table. And update the values.
18. Update designation of employee with emp_no E1002 to ‘Manager’.
19. Display the department names in its alphabetical order.
20. Display details of employees in HR department.
21. Update the department name of department number D1003 to ‘Production’.
22. Add a new column Aadhar_no to the employee table and update the values.
23. Find the number of male and female employees.

III. PROGRAM –III : BOOK DETAILS

Create table Book and Issue with following fields

Book (book_id,book_name,author_name,publisher, category, unit_price,quantity)

Issue(Issue_id,Book_id,qty_issued, stud_name)

Provide appropriate constraints on relationship among tables.

1. Insert at least 5 records into each table.
2. Select all the records from the table Book and Issue.
3. Find the unique publishers.
4. Increase the quantity of the book with name "Algorithm' by 10.
5. Display the book id, book name and quantity for all books which are not issued.
6. Display the names and price of book in descending order of price.
7. Find the book name and author name with the publishers name as 'University Press'.
8. Add a new column date_of_issue to the Issue table and update it.
9. Display book details in ascending order.
10. Find the highest cost book.
11. Find lowest cost book.
12. Change issue date of book_id 105 to '01/02/2021'.
13. Delete issue details if 'novel' type books.
14. Display total number of issues in each date.
15. Display all issued books.
16. Display all books that name starts with "S'.
17. Find the book details with quantity greater than 20.
18. Remove book details with book id 8051.
19. Find the book details with price between 200 and 600.
20. Display name of books with 5 characters.
21. Find total number of books.
22. Create a view which contains the details of book that has not been issued yet.

IV. PROGRAM –IV : CUSTOMER DETAILS

Create table Customer and Item with following fields

Customer (Cust_no,Cust_name, Cust_sex, Cust_phone)

Item(Item_id,Item_name,Item_quantity, Item_price,Cust_no)

Provide appropriate constraints on relationship among tables.

1. Insert at least 5 records into each table.
2. Display all male customers those phone number with '345'.
3. Display the number of male and female customers.
4. Display the details of all customers, who bought more than 300 quantities of items.
5. Update the price of item rice by 20%.
6. Retrieve details like customer name ,item name where customer name starts with letter "M".
7. Update the amount by 20% reduction, if amount of purchase greater than 1000.
8. Delete all details of customers who name end with 'y'.
9. Display customer names, whose name has 7 characters.
10. Display customer names, whose names second letter is 'o'.
11. Display item name, whose price is in between 100 and 200.
12. To display item name, price and customer name of those items, whose price is between 1000 and 3000 both values inclusively.
13. To increase the price of all items by Rs. 10%.
14. List the details of item having maximum quantity.
15. Add a new column Pur_date(purchase date). And update the values.
16. Display the details of item having minimum price.
17. Rename the customer whose name is "Ajay" to "Ajayan".
18. Create a view contains the details of all customers, who bought items on '01/01/2020'.
19. Create a procedure for the following:
    a) List the customer number, customer name and phone number in the alphabetical order of customer name.
    b) Find the customers whose name starts with 'S'.

V. PROGRAM –V : SAILOR DETAILS

Create table SAILOR and BOAT_RESERVE with following fields

SAILOR (sail_id,sail_name,age)

BOAT_RESERVE(boat_id,boat_name,boat_colour,sail_id)

Provide appropriate constraints on relationship among tables.

1. Insert at least 5 records into each table.
2. Find the name and age of all sailors.
3. Add a new column 'reserve_date' to the BOAT_RESERVE table and update it.
4. List all the boat names end with "sea".
5. Display distinct colors of boat.
6. Find the name of sailors who have reserved a boat.
7. Find the name and age of all sailors whose name's third letter is 'n'.
8. List all the sailors whose age in between 25 and 40.
9. List all the sailors who reserved RED colour boat.
10. Find the average age of all sailors.
11. Find the name of sailors who have reserved a RED or GREEN boat.
12. Display the details of sailors those who haven't reserved any boat.
13. Delete all blue boats.
14. Display the details of sailors in ascending order of age.
15. Join sailor and boat_reserve table.
16. Create a view for finding all sailors who reserved boat on '10/07/2020'.
17. Create a procedure for the following:
    a) Find the name age of all sailors in the descending order of age.
    b) Find the boats whose name starts with 'D'.

VI. PROGRAM –VI : PRODUCT AND SALES DETAILS

Create table PRODUCT and SALES with following fields

PRODUCT (pno,pname,quantity,unit_price)

SALES (order_no,quantity_ordered,pno)

Provide appropriate constraints on relationship among tables.

1. Insert at least 5 records into each table.
2. Display the names of product without duplication.
3. Increase the quantity_ordered for order_no 5001 to 100.
4. Find the sum and average price of all products.
5. List the product number, name and quantity ordered for the order '356' using join.
6. Find the product name ending with 'n'.
7. Display the product details with quantity less than 5.
8. Add a column 'date_mfg' (date of manufacturing) to the product table and update the date.
9. Find the highest and lowest price of products.
10. Increase the unit price of product no '510' by Rs. 50.
11. Delete product with quantity and price, quantity<5 and price>5000.
12. List the product no, product name and quantity ordered sold for the product 'paper'.
13. Find the product details with product name have 5 letters starting with "m" and ending with "h".
14. Increase the quantity of 'DVD' and 'Flash Drive' to 50.
15. List the product number and name of products which are ordered.
16. Find the product details with unit price between 1000 and 5000.
17. Create a view containing details of products that have not been sold yet.
18. Create a procedure for the following:
    a) Find the highest and lowest price of products.
    b) Find the product details with exactly 5 letters.

VII. PROGRAM –VII : SUPPLIER AND PRODUCT DETAILS

Create table SUPPLIER and PRODUCT with following fields

SUPPLIER(sno,sname,city,phone_no)

PRODUCT(pr_id, pr_name, sno, quantity, price)

Provide appropriate constraints on relationship among tables.

1. Insert at least 5 records into each table.
2. Find the product name and price of product with maximum price.
3. Decrease the price of product "Computer" by 2000.
4. List the product name, quantity and price of products supplied by "ABC Suppliers".
5. List the product details in the alphabetical order of product name.
6. Find the details of suppliers in the cities 'Coimbatore' and 'Mumbai'.
7. Create a view on the product table.
8. Find the suppliers whose phone number is NULL.
9. Count the city wise number of suppliers.
10. Display details of suppliers in 'Kottayam'.
11. Change the phone number of supplier with name 'Cloud'.
12. Sort the product table on the highest price of product.
13. Find the number of suppliers.
14. Join tables' supplier and product.
15. Display product details with price between 1000 and 3000 & quantity between 20 and 40.
16. Create a view on the supplier table.
17. Create a procedure for the following:
    a) Find the product name and price of product with minimum price.
    b) List the product details in the alphabetical order of product name.

VIII. PROGRAM –IV : APPLICANT AND COURSE DETAILS

Create table APPLICANT and COURSE with following fields

APPLICANT (app_no,app_name,gender,address, city,phone)

COURSE(cid,course_name,course_duration,app_no)

Provide appropriate constraints on relationship among tables.

1. Insert at least 5 records into each table.
2. Display course name and duration of all courses.
3. Change the duration of course 'BCA' to 3 years.
4. Find the details of applicants applied for BCA.
5. Count the course wise applicants for each course.
6. Find the details of all male students.
7. Find the number of male and female students.
8. Display applicant's details in the alphabetical order of app_name.
9. Find the students whose phone number is NULL.
10. Display applicant details from "pala'.
11. Display course details with duration of course greater than 2 years.
12. Create a view on the APPLICANT table.
13. Find total number of applicants.
14. Add a new column age into the applicant table and update the values.
15. Display applicant details whose age greater than 20.
16. Display applicant name, phone number and course name.
17. Create a procedure for the following:
    a) Display applicants name and course name.
    b) Display all female applicants .

IX. PROGRAM –IX : LOAN AND PAYMENT DETAILS

Create table LOAN and PAMENT with following fields

LOAN (loan_no,customer_name,loan_date,amount)

PAYMENT (pay_id,pay_date,loan_no,amount,interest)

Provide appropriate constraints on relationship among tables.

1. Insert at least 5 records into each table.
2. Display customer name and loan amount.
3. Increase the amount of the loan_no '10/2017' by Rs. 5000.
4. Delete all payments on '01/01/2020'.
5. Display total payments for each loan.
6. Display loan details with loan amount greater than 100000.
7. Display the loan number with highest payment amount.
8. Display customer name and amount sectioned in descending order of loan amount.
9. Count the number of customers with loan amount greater than 200000.
10. Display loan details with interest less than 9%.
11. Display customer name who are paying above or equal to 3000.
12. Display loan details with customer name with exactly 3 letters.
13. Display loan number and sum of payment which is more than 10000 for each loan.
14. Display loan number, customer name and loan amount on '30/12/2020'.
15. Create a view which contains customer name, pay_date, loan_no, amount, interest.
16. Create a procedure for the following:
    a) Display customer name and loan amount with loan number 'L108'.
    b) Display customer name whose name starts with 'S' and ends with "Y' and exactly 4 letters.

X. PROGRAM –X : TEACHER and DEPARTMENT DETAILS

Create table TEACHER and DEPARTMENT with following fields

TEACHER (Tcr_id,Tname,Dept_id,subject,salary)

DEPARTMENT (Dept_id,Dept_name)

Provide appropriate constraints on relationship among tables.

1. Insert at least 5 records into each table.
2. Update subject of teacher, whose Tcr_id is 'T101' to "JAVA'.
3. Delete all details of teachers whose name starts with 'A'.
4. Display number of teachers in each department.
5. List the details of teachers in the ascending order of department name.
6. List detail of teachers who draw minimum salary.
7. List the average salary in each department.
8. Display sum of salary of all teachers.
9. Display teacher name in the "Computer" department.
10. Increase the salary of all teachers by 1000.
11. Display the sum of salary which is more than 100000 for each department.
12. Create a view contains the list of teacher name, subject and department name.
13. Create a procedure for the following:
    a) Display teacher name and salary in the descending order of salary.
    b) Display the name of departments in alphabetical order.

XI. PROGRAM –XI : EMPLOYEE and PAYSLIP DETAILS

Create table EMPLOYEE and PAYSLIP with following fields

EMPLOYEE (emp_code,emp_name,designation, street, city age, dept_code)

PAYSLIP (pay_id, emp_code, basic_salary, hra, da)

Provide appropriate constraints on relationship among tables.

1. Insert at least 5 records into each table.
2. Display the designation without duplication.
3. Update table employee. Add 15 years of age to employee with emp_code '107'.
4. Create a view which shows details of employees whose age is between 35 and 45.
5. Retrieve employee code, employee name, street and net pay, in the descending order of net pay.
6. List the name and address of employees drawing basic salary between 15000 and 20000.
7. Add a new column net_pay in the payslip table and update the salary of all employees.
8. Display all details including net_pay for employees with emp_code>107.
9. Display average, minimum and maximum age of all employees.
10. Find number of employees in each department.
11. Create a view contains employee name and total salary.
12. Create a procedure for the following:
    a) Display employee details who lives in 'Kottayam'.
    b) Retrieve name and net_pay of employees who earn more than the average net_pay.

XII. PROGRAM –XII : NEWSPAPER and PUBLICATION DETAILS

Create table NEWSPAPER and PUBLICATION with following fields

NEWSPAPER (Nid,Nname,language,price)

PUBLICATION (pid, place, Nid))

Provide appropriate constraints on relationship among tables.

1. Insert at least 5 records into each table.
2. Retrieve newspaper name and its language in the alphabetical order of newspaper name.
3. List newspaper details that's name starts with "M".
4. Find the number of English newspapers.
5. Update the price of Manorama to 9.
6. Find the number of newspapers in language wise.
7. Add a new column No_pages(Number of pages) to the newspaper table.
8. Update each field of number of pages column.
9. Display the newspaper name whose pages are less than 15.
10. Delete details of Hindi newspapers.
11. Display newspaper name with minimum and maximum price.
12. Display details of newspaper that published in Kochi.
13. Create a view for finding newspaper name with price 7.
14. Create a view for finding the costliest newspaper.
15. Create a procedure for the following:
    a) Display newspapers with number of pages between 12 and 15.
    b) Find the number of Malayalam newspapers.