1. **Write PL/SQL program to display the details of the Employee using function.**
2. **Write a PL/SQL procedure called MULTI\_TABLE that takes two numbers as parameter and displays the multiplication of the first parameter till the second parameter.**
3. **Create a function to find factorial of a number.**
4. **Create a procedure to calculate the perimeter of the rectangle for 10 values (Use while loop construct)**
5. **Create a function to return the sum of the salary in the customer table whose age is greater than 25.**
6. **Create a function to find maximum of three numbers.**
7. **Create a function to find fibanocci series.**
8. **Create a view with course\_id, Course\_name, instructor\_id, name, and department.**
9. **Find a minimum of two values (take two numbers using IN mode and return their minimum using OUT parameters)**
10. **Write a PL/SQL program to insert a record into student table**
11. **Create a procedure to calculate the area of the square for 5 values (Use while loop construct)**
12. **Write a PL/SQL program to swap two numbers.**
13. **Write a PL/SQL program to find the given number is even or odd.**
14. **Write a PL/SQL program to find the addition and subtraction of two numbers.**
15. **Write PL/SQL program to display the details of the person using function.**
16. **Create a procedure to calculate the perimeter of the triangle .**
17. **Create a Row level after update trigger to insert the new values into another table also.**
18. **Write PL/SQL program to display the details of the Student using function.**
19. **Create a procedure to calculate the area of the triangle .**
20. **Create a procedure to calculate the circumference of a circle .**
21. **Create a procedure to calculate the perimeter of a square.**
22. **Create a procedure to calculate the area of square**
23. **Create a procedure to calculate the area of rectangle**
24. Write a PL/SQL Program to find Factorial of a Number
25. Write a PL/SQL program to update the rating of the company where system is “PC”
26. Write a program in PL/SQL to print the prime numbers between 1 to 50.
27. Write a program in PL/SQL to calculate the area of the square using function.
28. Create a function to calculate the Fibonacci of given number using PL/SQL.
29. Write a PL/SQL program insert a record in Order\_item.
30. Create a function to find the maximum salary from the table customer.
31. Write a PL/SQL program to find 5 skip count upto 50.
32. Write a PL/SQL Procedure Using Explicit Cursor to Fetch the student from the Table
33. Write the function to display the above employee details using PL/SQL.
34. Consider the following relations for an order processing database application in a company.  
    **CUSTOMER( custno:int , cname:string , city:string )  
    ORDER( orderno:int , odate:date , custno:int , ord\_amt:int )  
    ORDER\_ITEM( orderno:int , itemno:int , quantity:int )  
    ITEM( itemno:int , unitprice:int )  
    SHIPMENT( orderno:int , warehouseno:int , ship\_date:date )  
    WAREHOUSE( warehouseno:int , city:string )**

(i)Create the above tables by properly specifying the primary keys.

(ii)Enter at least five tuples for each relation.  
(iii)Produce a listing: custname ,no\_of\_orders , avg\_order\_amount ,  where the middle column is the total number of orders by the customer and the last column is the average order amount for that customer.  
(iv)List the orderno for orders that were shipped from all the warehouses that the company has in a specific city.  
(v)Demonstrate the deletion of an item from the ITEM table and demonstrate a method of handling the rows in the ORDER\_ITEM table that contains this particular item.

**35.** Consider the following database schema

**SAILORS (SID, SNAME, RATING, AGE)**

**BOATS (BID, BNAME, COLOR)**

**RESERVES (SID, BID, DAY)**

**Write the following queries in SQL**

(i)Create the above tables and relate it by properly specifying the primary key, color of Boat should be unique.

(ii)Populate the above tables properly with the suitable records. There should not be any null value.

(iii)Display the name of sailor that has age greater than all the sailor rating is 10.

(iv)Find the Day for reserves and name of the boat whose boat color is yellow.

(v)Count the number of sailors whose SID is greater than 5.

(vi)Delete all the tables from the database.

**36. Table:** Student (ROLLNo, Name, Age, Branch, City) &

Course (Rollno, Courseid, Semester, Credit)

1. Create a table Student and Course with above attributes and ROLLNO as primary key
2. display the students whose city is Mumbai
3. add DOB column
4. display the list of names whose age is less than 20
5. count the number of student registered in course
6. Display the list of students who have not registered for any course in IV semester.

**37.** Consider the schema for Movie Database:

**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)**

1. Create the above tables and relate it by properly specifying the primary keys and the foreign keys
2. List the titles of all movies directed by ‘Aswin’.
3. Update the title of the movie whose ID is MV101 to ÄVENGERS”.
4. List all actors who acted in a movie before 2020 and also in a movie after 2024 (use JOIN operation).
5. Find the title of movies and number of stars for each movie that has at least one rating

**38.** Consider the DB schema

**Course(course\_id, Course\_name, credit)**

**Instructor(instructor\_id, name, phone\_no, department,salary)**

Course\_offered(

|  |  |  |
| --- | --- | --- |
| **Course id** | **Instructor\_id** | **Offered\_in** |
| DBMS | Ms.MSK | ODD |
| GIT | Ms.RT | ODD |
| GIT | Ms.MMR | EVEN |
| JAVA | Ms.MVD | ODD |
| JAVA | Ms.DS | EVEN |
| PYTHON | Dr.SN | ODD |
| DPV | Dr.SKV | EVEN |

Write an SQL query to

1. Create the above tables and relate it by properly specifying the primary keys
2. Populate the above tables properly with the suitable records. There should not be any null value. And assume the default department of the instructor is ‘AI’
3. list the course offered in both odd and even semester
4. list the instructor who offer the course in odd semester
5. Find the second highest salary of the instructor

**39.** Consider the following database of student enrollment in courses and books adopted for that course.  
**STUDENT**( **regno**:string , name:string , major:string, bdate:date )  
**COURSE**( **courseno**:int , cname:string , dept:string )  
**ENROLL**( **regno**:string , **courseno**:int , **sem**:int , marks:int )  
**BOOK\_ADOPTION**( **courseno**:int , **sem**:int , book\_isbn:int )  
**TEXT**( **book\_isbn**:varchar , book\_title:string , publisher:string , author:string )  
 1)Create the above tables by properly specifying the primary keys and foreign keys.  
 2) Enter atleast five tuples for each relation.  
 3) Demonstrate how you add a new text book to the database and make this book to be adopted by some department.  
 4) Produce a list of text books (includes courseno , book\_isbn , book\_title ) in the alphabetical order for courses offered by the 'AI' department that use more than two books.  
 5) Delete the record for the ISBN number “ISBNO0000034”.

40. Consider the following database schema

**Instructor: ID, Name, Deptname, Salary.**

**Course: Courseid, Title, Deptname, Credit.**

**Teaches: ID, Courseid, Sec\_id, Semester, and Year.**

Write the following queries in SQL

i) Create the above tables and relate it by properly specifying the primary keys. Salary should be greater than 0.

ii) Populate the above tables properly with the suitable records. Let the default department name of the student is CSE

iii) Find the average salary of instructors in CSE department

iv) Find the names of the instructors who teach the course DBMS

v)Delete all the tables from the database

**41.** Consider the following database for a banking enterprise.  
BRANCH( **branch\_name**:string , branch\_city:string , assets:real )  
ACCOUNT( **accno**:int, branch\_name:string , balance:real )  
DEPOSITOR( **customer\_name**:string , **accno**:int )  
CUSTOMER( **customer\_name**:string , customer\_street:string , customer\_city:string )  
LOAN( **loan\_number**:int , branch\_name:string , amount:real )  
BORROWER( **customer\_name**:string , **loan\_number**:int )  
i)Create the above tables by properly specifying the primary keys and foreign keys.  
ii)Enter at least five tuples for each relation.  
iii)Find ***all*** the customers who have at least two accounts at the ***main*** branch.  
iv)Find all the customers who have an account at ***all*** the branches located in a specific city.  
v)Delete all account tuples at every branch located in a specific city.

**42.** Create the following tables and write the query for the given statements below

**Student(ID,NAME,DOB)**

**Staff(ID,NAME,DEPARTMENT)**

**Subject(COURSE\_CODE,COURSE\_NAME)**

i) rename the Student table to Student\_Info

ii) Add DOJ to Student\_Info table

iii) update the staff name to Anu”whose id is 103

iv) alter the subject table by changing the attribute COURSE\_CODE to

COURSE\_ID

v)delete all the records of Student\_Info table

**43.** Create the following tables and write the query for the given statements below

**Employee(ID,NAME,DOJ)**

**Branch(ID,NAME)**

**Bank(NAME,ACCOUNT\_NO,IFSC\_CODE)**

i) rename the Employee table to Emp\_details

ii) Add SALARY to Emp\_details table

iii) describe the structure of Bank table

v)alter the Branch table by changing the attribute NAME to BRANCH\_NAME

**44.** Consider the following relational database schemas:

**Passenger(pid, pname, pgender, pcity)**

**Agency(aid, aname, acity)**

**Booking(pid,aid,fid,fdate)**

**Flight(fid, fdate, time, src, dest)**

Answer the following questions using relational algebra queries:

i) Get the complete details of all flights to New Delhi

ii) Find the passengers name who bookd flight on 15-aug-2023

iii) Get the details about all flights from Chennai to Mumbai

iv) Update the passenger name to Ärun”whose id is 102.

v) Delete all the records whose destination is “Chennai”

**45.** Create the following tables and write the query for the given statements below

**Employee(ID,NAME,DOJ)**

**Branch(ID,NAME)**

**Bank(NAME,ACCOUNT\_NO,IFSC\_CODE)**

i) rename the Employee table to Emp\_details

ii) Add SALARY to Emp\_details table

iii) describe the structure of Bank table

iv)alter the Branch table by changing the attribute NAME to BRANCH\_NAME

v)delete all the records of Branch table, Emp\_details, Branch and Bank table

**46.** Consider the following database schema

**Customer**: CustomerID, Customer Name, Contact Name, Address, City , Postal Code , Country

**Order**: OrderID, CustomerID , EmployeeID , OrderDate , ShipperID, Amount.

Write the following queries in SQL

1. Create the above tables and relate it by properly specifying the primary keys and ShipperID should be unique
2. Populate the above tables properly with the suitable records. There should not be any null value.
3. Find the names of all Customer whose Customer name is end with J
4. Find the address of customer who has not order placed
5. Delete all the tables from the database

**47.** ) Consider the following database schema

**Supplier**(sid,sname,address)

**Product**(pid, pname, unit\_cost , qty, sid)

**Order**(oid,odate,sid)

**Order\_product**(oid, pid,qty)

Write the following queries in SQL

i) Create the above tables and relate it by properly specifying the primary keys and Unit\_cost and qty should be greater than 0.

ii) Populate the above tables properly with the suitable records. Let the default address of supplier is ‘Erode’.

iii) Find the total amount of orders supplied by the supplier id=S123.

iv) Display the supplier name, product name, qty ordered, unit cost, total amount for the order id ‘Or4567’.

v) Delete all the tables from the database.

**48.** Consider the following database schema

**Suppliers**(sid: integer, sname: string, address: string)

**Parts**(pid: integer, pname: string, color: string)

**Catalog**(sid: integer, pid: integer, cost: real)

**Write SQL statement to**

1. Create the above tables and relate it by properly specifying the primary keys and Cost of the product should be greater than 0.
2. add the mobile number to the supplier
3. Find the sids of suppliers who supply only red parts
4. Find the sids of suppliers who charge more for some part than the average cost ofthat part (averaged over all the suppliers who supply that part).
5. Delete all the records from the tables.

**49.** ) Consider the following database schema

**Person** (driver-id, name, address)

**Car** (license, model, year)

**Owns** (driver-id, license, name)

**Accident** (report-number, date, location)

**Participated** (driver-id, car, report-number, damage-amount)

Write the following queries in SQL

1. Create the above tables and relate it by properly specifying the primary keys and Default Model of the car is TATA.
2. Set the criteria ‘damage-amount should not be less than 0’. Populate the above tables properly with the suitable records
3. Find the car model and driver-id of the owner who had licensed.
4. Increase the damage-amount of each participated in the SUZUKI car by 10 percent
5. Delete all the tables from the database.

**50.** Consider the following database consisting of the following tables:

            Inventory (item, level, cost)

            Minlevel (item, level)

            Reorder (item, quantity)

            Purchase (item, quantity, cost, customer name, date\_of\_purchase)

1. Create the above tables and relate it by properly specifying the primary keys and insert the records.
2. Set the criteria ”cost of Inventory not less than 0”.
3. Display the number of customers for the shop on a particular day.
4. Write a query to display the item purchased by a given customer name.
5. Update the quantity of the item.

**51.** Consider the following database consisting of the following tables:

**Hostel** (hno, hname, type [boys/girls])

**Menu** (hno, day, breakfast, lunch, dinner)

**Warden** (wname, qual, hno)

**Student** (sid, sname, gender, year, hno)

1. Create the above tables and relate it by properly specifying the primary keys and insert the records.

ii) Display the total number of girls and boys hostel in the college.

1. Display the menu in the hostel ‘x’ on Tuesday.
2. Update the breakfast as “”poori” on Tuesday.
3. Count the total number of student.

**52.** Consider the following database consisting of the following tables:

**Department** (dept\_id, dep\_name)

**Student** (rollno,stu\_name, gender, mark1, mark2, mar3, total, average, dept\_ id)

**Staff** (staff\_ id, staff\_name, designation, qualification, dept\_ id)

**Tutor** (rollno, staff\_ id)

i) Create the above tables and relate it by properly specifying the primary keys and insert the records.

ii) Display the student details who come under the tutor ship of the given staff name ‘X’.

iii) Display the student details who got greater than overall average marks of their department.

iv) Update the staff\_id when rollno=”22adr004”.

v)Count the total number of student.

**53.** Consider the following database consisting of the following tables:

**Employee** (ssn, first\_name, last\_name, gender, designation, doj, address)

**Employee-salary** (ssn, basic\_pay, DA, TA, pay)

**Department** (did, depnament)

i) Create the above tables and relate it by properly specifying the primary keys and insert the records.

ii) Retrieve all the information about employees working in ‘Research’ department.

iii)update the basic\_pay of the employee whose ssn =”001”.

iv)describe the above mentioned tables.

v)delete the records from the employee, employee-salary and department table.

**54.** Consider the following database consisting of the following tables:

emp (eno, ename, bdate, title, salary, dno)

proj (pno, pname, budget, dno)

dept (dno, dname, mgreno)

workson (eno, pno, resp, hours)

i) Create the above tables and relate it by properly specifying the primary keys and insert the records.

ii) Write an SQL query that returns the project number and name for projects with a budget greater than $100,000

iii) Write an SQL query that returns the employee name, department name, and employee title

iv) Write an SQL query that returns the departments (all fields) ordered by ascending department name

v) delete the records from the above tables.

**55.** An Enterprise wishes to maintain a database to automate its operations. Enterprise is divided into certain departments and each department consists of employees.

The following two tables describes the automation schemas

**Dept** (deptno, dname, loc)

**Emp** (empno, ename, job, mgr, hiredate, sal, comm, deptno)

i) Create the above tables and relate it by properly specifying the primary keys and insert the records.

ii)Update the employee salary by 15%, whose experience is greater than 10 years.

iii) Delete the employees, who completed 30 years of service.

iv) Display the manager who is having maximum number of employees working under him?

v) Delete the records from the above tables

**56.** Consider the following database consisting of the following tables:

**stu\_details** (reg\_no, stu\_name, DOB, address, city)

**mark\_details** (reg\_no, mark1, mark2, mark3, total)

i) Create the above tables and relate it by properly specifying the primary keys and insert the records.

ii)Alter the table mark\_details to add a column average.

iii)Display the maximum average marks.

iv)delete the city column from stu\_details.

v)delete the records of the above table.

**57.** Consider the following database consisting of the following tables:

Create a table EMPLOYEE with following schema: (Emp\_no, E\_name, E\_address, E\_ph\_no, Dept\_no, Dept\_name,Job\_id , Salary)

i) insert the records properly by specifying the primary key.

ii) Add a new column; HIREDATE to the existing relation.

iii) Change the datatype of JOB\_ID from char to varchar2.

iv)Change the name of column/field Emp\_no to E\_no.

v) Modify the column width of the job field of emp table.

58. Consider the table

Employee (Empno, Name, dept\_id, Experience, Salary).

Department (dept\_id, dept\_name)

Employeedetails (Empno, Qualification, contact\_no, branch )

1. Create and insert values for the above table schema
2. list all the employees whose name starts with the letter 'S'.
3. Find the highest experience employee in each department.
4. Order the employee details based on dept\_id

Write a query to display the name of the employee whose id is ”103”

59. Consider the table

Student(stud\_id, name, course\_id, percentage, age, city\_id)

Courses(course\_id, course\_name)

City(city\_id, city\_name)

1. Create and insert values for the above table schema
2. Find the names of students who are enrolled in the ‘Mathematics’ course.
3. List the names and percentages of students who live in the same city.
4. Update the age of the student whose id is “S01” as “19”
5. Retrieve the city names where students with a percentage greater than 90%.
6. Delete students older than 25 who live in Chicago:

**60.**  Consider the table company

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **title** | **company** | **type** | **Production\_year** | **system** | **production\_cost** | **revenue** | **rating** |
| Blasting Boxes | Simone Games | action adventure | 1998 | PC | 100000 | 200000 | 7 |
| Run Run Run! | 13 Mad Bits | shooter | 2011 | PS3 | 3500000 | 650000 | 3 |
| Duck n’Go | 13 Mad Bits | shooter | 2012 | Xbox | 3000000 | 1500000 | 5 |
| SQL Wars! | Vertabelo | wargames | 2017 | Xbox | 5000000 | 25000000 | 10 |

1. Find maximum production cost of the company
2. Alter the attribute “**production\_cost” as “p\_cost”**
3. Display Games Produced per Year with Average Revenue
4. Find the production year of the game ” Blasting Boxes”
5. Delete the record where company name is “13 Mad Bits” and production year is “2011”

61. Consider the following table

employees(emp\_id , emp\_name , job\_name , manager\_id , hire\_date , salary , commission , dep\_id)

department(dep\_id,dep\_name,dep\_location)

1. Create and insert values for the above table
2. write a query to display the name of the those employees gets more salary than the employee whose ID is “EID05”.
3. display employee id , employee name of all employees in name order who locate in the location with the id 1700 .
4. display employee\_id, first\_name, last\_name, salary of the employees whose salary is equal to the highest salary of all employees
5. find the employee who has minimum salary

62. Consider the table

Salesman(salesman\_id,name,city,commission)and Orders(ord\_no,purch\_amt, ord\_date,customer\_id,salesman\_id)

1. write a SQL query to find all the orders issued by the salesman “John”
2. Write a SQL query to find all orders generated by London-based salespeople and Return ord\_no, purch\_amt, ord\_date, customer\_id, salesman\_id.
3. Dlete the order whose id is “ID2001”
4. Write a SQL query to find all the orders generated in New York city. Return ord\_no, purch\_amt, ord\_date, customer\_id and salesman\_id.
5. Write a SQL query to determine the commission of the salespeople in Paris.

63. Consider the following database tables:

            Party (pid, pname, leader)

            Constituency (cid, cname)

            Contestant (ctid, ctname, ctaddr)

            Election (ctid, number\_of\_votes, pname, cname)

1. Create and insert values for the above table
2. Order the table Constituency with cid attribute
3. Display the contestant details if they secured greater than 10,000 votes.
4. Find the number of contestants, constituency wise.
5. Delete the record in the table Election whose pname is “Palanikumar”

64. Consider the table : Product

|  |  |  |  |
| --- | --- | --- | --- |
| product\_id | product\_name | supplier\_name | unit\_price |
| 100 | Camera | Nikon | 300 |
| 101 | Television | Onida | 100 |
| 102 | Refrigerator | Videocon | 150 |
| 103 | Ipod | Apple | 75 |
| 104 | Mobile | Nokia | 50 |

Table: Order\_items

|  |  |  |  |
| --- | --- | --- | --- |
| order\_id | product\_id | total\_units | customer |
| 5100 | 104 | 30 | Infosys |
| 5101 | 102 | 5 | Wipro |
| 5102 | 103 | 25 | Wipro |
| 5103 | 101 | 10 | TCS |

Consider the above tables and answer the following queries

1. Find the suppliers who supply items to Wipro [Using Natural Join]
2. List the unique product’s name whose price is less than the maximum price of the product.
3. Count the number of orders of customer “wipro”
4. Display the product\_name ends with “a”
5. Apply Cartesian join on product and order\_items table.

65. Consider the following tables:

            Employee (ssn, first\_name, last\_name, gender, designation, doj, address)

            Employee-salary (ssn, basic\_pay, DA, TA, pay)

            Department (did, depname, mgrssn)

            Employee-department (ssn, deptid)

            Employee-dependency (ssn, depname, deprelationship)

1. Create and insert values for the above table
2. Retrieve the names of employees who have no dependents.
3. Retrieve all the information about employees working in ‘AI ’ department including the department information
4. Retrieve the doj, address of employees who work for ‘Research’ department
5. For each employee, retrieve the employee’s first name and last name.

66. Consider the following database consisting of the following tables:

            Branch (bname, bcity, assets)

            Account (ano, starting\_date, balance)

            Customer (cusid, cus\_name, address)

            Deposit (ano, cusid, bname)

            Transaction (ano, amount, mode, date\_of\_trans)

1. Create and insert values for the above table
2. Find the minimum account balance at each branch and display only if it is greater than 10000.
3. Display the branch details located in a city ending with the letter ‘e’.
4. Display the ano where date\_of\_trans on “12-07-2024”
5. Find the customer name in the branch “Erode”

67. Consider the following database consisting of the following tables:

            Inventory (item, level, cost)

            Reorder (item, quantity)

            Purchase (item, quantity, cost, customer name, date\_of\_purchase)

1. Create and insert values for the above table
2. Display the number of customers visited the shop on a particular day.
3. Write a query to display the item purchased by a given customer name.
4. Count the number of items in reoder.
5. Find the maximum cost in purchase table where date\_of\_purchase is “01-06-2024”

68. Consider the following tables:

STUDENT ( rollno, name, gender, year of admission, mail\_id, phone number, aadhar number, and address)

MARK ( rollno, Semester, GPA)

1. Create and insert the values into the table.
2. Find the aadhar number of the male student
3. Create a view with roll no, name, semester, GPA
4. Display the average GPA on created view
5. Drop the created view

69. Write SQL queries for the following

1. Create and insert value for the table employee and department with necessary attributes
2. Describe the employee and department table
3. Admin wants to share his database to the public and also allow them to update his database.
4. Admin wants to revoke all privileges of database from public.
5. Delete all the records from the above table