

1)

DEPARTMENT (dept_no, dept_name, location)

1. Create the Simple DEPARTMENT Table.

2. Display structure of department table.

3. Insert below records into Department Table

Dept_no	Dept_name	Location
10	Account	NY
20	HR	NY
30	Production	DL
40	Sales	NY
50	EDP	MU
60	TRG	
110	RND	AH

4. Display all records of Department table

5. Display all department belonging to location 'NY'

6. Display details of Department 10

7. List all department names starting with 'A'

8. List all departments whose number is between 1 and 100

9. Delete 'TRG' department

10. Change department name 'EDP' to 'IT'

2)

Create the EMPLOYEE Table with all necessary constraints such as

EMPLOYEE (emp_id, emp_name, birth_date, gender, dept_no, address, designation, salary, experience, email)

Employee id should be primary key

Department no should be Foreign key

employee age (birth_date) should be greater than 18 years

salary should be greater than zero

email should have (@ and dot) sign in address

designation of employee can be “manager”, “clerk”, “leader”, “analyst”, “designer”, “coder”, “tester”.

Create DEPARTMENT table with necessary constraint such as

DEPARTMENT (dept_no, dept_name, location)

Department no should be primary key

department name should be unique.

11. After creation of above tables, modify Employee table by adding the constraints as ‘Male’ or ‘Female’ in gender field and display the structure.

12. Insert proper data (at least 5 appropriate records) in all the tables.

13. Describe the structure of table created

14. List all records of each table in ascending order.

15. Delete the department whose location is Ahmedabad.

16. Display female employee list

17. Display Department wise employee Names

18. Find the names of the employee who has salary less than 5000 and greater than 2000.

19. Display the names and the designation of all female employee in descending order.

20. Display the names of all the employees whose names start with ‘A’ and end with ‘A’.

21. Find the name of employee and salary for those who had obtain minimum salary.
22. Add 10% raise in salary of all employees whose department is 'IT'.
23. Count total number of employees of 'IT' department.
24. List all employees who born in the current month.
25. Print the record of employee and dept table as "Employee works in department 'MBA'.
26. List names of employees who are fresher's (less than 1 year of experience).
27. List department wise names of employees who has more than 5 years of experience.
28. Crete Sequence to generate department ID
29. List department having no employees

3)

STUDENT (rollno, name, class, birthdate)

COURSE (courseno, coursename, max_marks, pass_marks)

SC (rollno, courseno, marks)

1. Create the above three tables along with key constraints.
2. Write an Insert script for insertion of rows with substitution variables and insert appropriate data.
3. Add a constraint that the marks entered should strictly be between 0 and 100.
4. While creating SC table, composite key constraint was forgotten. Add the composite keynow.
5. Display details of student who takes 'Database Management System' course.
6. Display the names of students who have scored more than 70% in Computer Networks and have not failed in any subject.
7. Display the average marks obtained by each student.
8. Select all courses where passing marks are more than 30% of average maximum mark.
9. Display details of students who are born in 1980 or 1982.
10. Create a view that displays student courseno and its corresponding marks.

4)

Create the database COMPANY and create given tables with all necessary constraints such as primary key, foreign key, unique key, not null and check constraints.

EMPLOYEE (emp_id, emp_name, birth_date, gender, dept_no, address, designation, salary, experience, email)

DEPART (dept_no, dept_name, total_employees, location)

PROJECT (proj_id, type_of_project, status, start_date, emp_id)

Insert proper data (at least 5 appropriate records) in all the tables.

Do as directed:

1. Delete the department whose total number of employees less than 1.
2. Display the names and the designation of all female employee in descending order.
3. Display the names of all the employees who names starts with 'A' ends with 'A'.
4. Find the name of employee and salary for those who had obtain minimum salary.
5. Add 10% raise in salary of all employees whose department is 'CIVIL'.
6. Count total number of employees of 'MCA' department.
7. List all employees who born in the current month.
8. Print the record of employee and dept table as "Employee works in department 'CE'".
9. List names of employees who are fresher's(less than 1 year of experience).
10. List department wise names of employees who has more than 5 years of experience.
11. Write a function which will display total number of projects based on status (pass status as parameter
12. Write a procedure that will display list of projects which is going to start today.
13. Write a trigger which do not allow insertion/update/delete into Project table if status type is 'pending'

5)

Create the database STUD and create given tables with all necessary constraints such as primary key, foreign key, unique key, not null and check constraints.

HOSTEL (HNO, HNAME, HADDR, TOTAL_CAPACITY, WARDEN)

ROOM (HNO, RNO, RTYPE, LOCATION, NO_OF_STUDENTS, STATUS)

CHARGES (HNO, RTYPE, CHARGES)

STUDENT (SID, SNAME, MOBILE-NO, GENDER, FACULTY, DEPT, CLASS, HNO, RNO)

FEES (SID, FDATE, FAMOUNT)

The STATUS field tells us whether the room is occupied or vacant.

The charges represent the term fees to be paid half yearly.

A student can pay either the annual fees at one time or the half yearly fees twice a year.

Insert proper data (at least 5 appropriate records) in all the tables.

Do as directed:

1. Display the total number of rooms that are presently vacant.
2. Display number of students of each faculty and department wise staying in each hostel.
3. Display hostels, which have at least one single-seated room.
4. Display the warden name and hostel address of students of Computer Science department.
5. Display those hostel details where single seated or double-seated rooms are vacant.
6. Display details of hostels occupied by medical students.
7. Display hostels, which are totally occupied to its fullest capacity.
8. List details about students who are staying in the double-seated rooms of Chanakya Hostel.

9. Display the total number of students staying in each room type of each hostel.
10. Display details about students who have paid fees in the month of Nov. 2017.
11. For those hostels where total capacity is more than 300, display details of students studying in Science faculty.
12. Display hostel details where there are at least 10 vacant rooms.
13. Display details of students who have still not paid fees.
14. Display those hostels where single-seated room is the costliest.

6)

Create the database HOSPITAL and create given tables with all necessary constraints such as primary key, foreign key, unique key, not null and check constraints.

DOCTOR (DNO, DNAME, SPECIALIZATION, CLINIC_ADDR)

MEDICINE (MNO, MNAME, TYPE, CONTENT, MANUFACTURER)

DISEASE (DISEASE_NAME, SYMPTOM1, SYMPTOM2, SYMPTOM3)

TREATMENT (TNO, DNO, DISEASE_NAME, MNO, DOSAGE, AVG_CURE_TIME)

Insert proper data (at least 5 appropriate records) in all the tables.

Do as directed:

1. Display records of each table in ascending order.
2. Count total number of doctors which has not given any treatment.
3. Display all Chennai doctors who treat cancer.
4. Remove disease “polio” from disease table as well as treatment table.
5. Delete all those treatment related to liver of Dr.Shah.
6. Create index on dno, Disease name in the treatment table.
7. Display details of doctors who treat migraines.
8. What is the maximum dosage of “penicillin” prescribe by the doctor for the treatment of any disease?
9. Display total number of disease treated by every doctor.
10. Which doctor have no treatment for “depression”?
11. Create a view which contains the treatment and doctors details. Make sure that no body is allowed to modify any detail in the view.
12. CREATE REPORT ON Symptoms wise total number of medicine given

Medicine	Symptom 1	Symptom2	Symptom3	Total
M1	999	999	999	9999
M2	999	999	999	9999
M3	999	999	999	9999

7)

Create the database SHOPPING and create given tables with all necessary constraints such as primary key, foreign key, unique key, not null and check constraints.

CUSTOMER (cno, cust_name, cust_phone, location,gender)

ITEM (itemno, itemname, color, weight, expire_date, price, shop_name)

CUST_ITEM (cno, itemno, quantity_purchased, date_purchase)

Insert proper data (at least 5 appropriate records) in all the tables.

Do as directed:

1. Delete the items whose price is more than 50000. .
2. Find the names of the customer who is located in same location as that of other customer.
3. Display the names of items which is black, white & brown in color.
4. Display the names of all the items whose names lies between 'p' and's'.
5. Find the item which is having less weight.
6. Add one month more to those items whose item no =40.
7. Count total number of items which is going to expire in next month
8. List all customers whose phone number starts with '99'.
9. Display total value (qty*price) for all items.
10. List customer details who has purchased maximum number of items
11. Display total price item wise.
12. List name of items, customer details and qty purchased.

8)

Create the following tables and establish relationship

Department (Deptno, Dept_Name, Location)

Employee_Master (Empno, Empname, Designation, DOB, DOJ, Gender, Salary and Deptno)

Employee_Detail (Emp_detail_id, Empno, Salary_Date, Basic, DA, HRA, TA, PF, TAX)

Create the following tables and establish relationship

Customer (Cust_no, Cust_name, City)

Item (Item_no, Name, Price, Stock, Mfg_date)

Order_Master (Order_no, Cust_no, Order_Date, Vendor_Name)

Order_Details (Order_no, Item_no, Quantity)

Create the following tables and establish relationship

Customer (cid, c_name, e_mail, city)

Product (pid, p_name, desc, rate)

Order(cid, pid, oid, odate, qty)

Insert 10 records in all the tables

- 1) Display the list of the customers where the city is “Ahmedabad”
- 2) Update the Rate of product to 11 where the pro_id is 4.
- 3) Delete the record with order_id 4.

9) Consider the DUAL and data dictionary tables/views to solve the following Queries.

1. Find out the names of all the tables, views and constraints associated with current tables in the system.
2. Write a query to add 15 days to the current date.
3. Write a query to Add and subtract 5 months from the current month.
4. Find out the ASCII equivalent of character ‘M’.
5. Find out the character equivalent of ASCII 67, 65 and 84.
6. Write a query to find the last day of the month.
7. Find out how many days are left in the current month.
8. Write a query to calculate the Date difference between current date and 20/05/2015.
9. Write a query to Calculate the number of months between current date and 03/03/2016.
10. Find out the second occurrence of ‘or’ from third position in the string ‘corporate floor ‘.
11. Find out log to the base 3 of 81.
12. Convert the string ‘gujarat technological university’ so that first character of each word is in capital.
13. Convert the string ‘jack and jue’ Into ‘black and blue’.
14. Round off the date 27-July-2016 to the current year.
15. Find out the user name and user id of currently logged on user.

10)

DISTRIBUTOR (dno, dname, daddress, dphone)

ITEM (itemno, itemname, colour, weight)

DIST_ITEM (dno, itemno, qty)

1. Add a column CONTACT_PERSON to the DISTRIBUTOR table with the not null constraint.
2. Create a view LONDON_DIST on DIST_ITEM which contains only those records where distributors are from London. Make sure that this condition is checked for every DML against this view.
3. Display the details of all those items that have never been supplied.
4. Delete all those items that have been supplied only once.
5. List the names of distributors who have an ‘A’ and also a ‘B’ somewhere in their names.
6. Count the number of items having the same colour but not having weight between 20 and 100.
7. Display all those distributors who have supplied more than 1000 parts of the same type.
8. Display the average weight of items of the same colour provided at least three items have that colour.
9. Display the position where a distributor name has an ‘OH’ in its spelling somewhere after the fourth character.
10. Count the number of distributors who have a phone connection and are supplying item number ‘I100’.
11. Create a view on the tables in such a way that the view contains the distributor name, item name and the quantity supplied.
12. List the name, address and phone number of distributors who have the same three digits in their number as ‘Mr. Talkative’.
13. List all distributor names who supply either item I1 or I7 or the quantity supplied is more than 100.
14. Display the data of the top three heaviest ITEMS.

11)

CUSTOMER(cid, fname, lname, city, country, phone)

ORDER (oid, oDate, oNumber, cid, oTotalAmount)

1. List the number of customers in each country. Only include countries with more than 100 customers.
2. List the number of customers in each country, except China, sorted high to low. Only include countries with 5 or more customers.
3. List all customers with average orders between Rs.5000 and Rs.6500.