

## SQL- Lab2

### Question 1

#### department

Column name	Datatype	Size	Constraint
deptno	Integer		PK
dname	Varchar	14	Not null
loc	Varchar	20	

DEPTNO	DNAME	LOC
10	ACCOUNTING	NEW YORK
20	RESEARCH	DALLAS
30	SALES	CHICAGO
40	OPERATIONS	BOSTON

#### employee

Column name	Datatype	Size	Constraint
empno	Integer		PK
ename	Varchar	20	Not null
job	Varchar	10	
mgr_id	Integer		
hire_date	date		
basic_sal	Numeric	(6,2)	Default value 1000
incentive	Numeric	(6,2)	Should not be greater than basic_sal
deptno	Integer		Refers to deptno of dept table

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	INC	DEPTNO
7369	SMITH	CLERK	7902	17/12/1980	6800		20
7499	ALLEN	SALESMAN	7698	20/02/1981	11600	300	30
7521	WARD	SALESMAN	7698	22/02/1981	11250	500	30
7566	JONES	MANAGER	7839	02/04/1981	22975		20
7654	MARTIN	SALESMAN	7698	28/09/1981	11250	1400	30
7698	BLAKE	MANAGER	7839	01/05/1981	22850		30
7782	CLARK	MANAGER	7839	09/06/1981	22450		10
7788	SCOTT	ANALYST	7566	09/12/1982	13000		20

## Queries

1. Create the tables with suitable constraints.
2. Insert data in the two tables.
3. Select all data from the DEPARTMENT table.
4. Get the details of all the employees.
5. Show the details of employee 'BLAKE'.
6. Get employee number, employee name of employees who are managers.
7. Display unique jobs with second letter as 'a' from the EMPLOYEE table.
8. Display the names of employees concatenated with their jobs.
9. Display all the names, department numbers and hired dates from the EMPLOYEE table.
10. Display employees in the ascending order of their names.
11. Find the names of all employees that begin with 'S' or 'J'
12. Get the highest salary from the EMPLOYEE table.
13. Display the names, deptno of all employees who receive salary between 10000 and 25000.
14. List department number and count of employees in each department ordered by department number.
15. List the names and hired date of managers and clerks without incentives.
16. Delete the records with deptno '10' from the EMPLOYEE table.
17. Print the names and jobs of all employees except 'analyst'.
18. Print the name of employees whose salaries are greater than the value 21000.
19. Find the names of employees who have a salary equal to Rs 13000.
20. Display the empname, deptno, hired date information in the dept '20' and '30'.

## Question 2

Create a table with the following columns :

Column name	Data type
Empno	vachar
Deptno	vachar
Name	vachar
Desig	vachar
Basic	numeric
Join_date	date
gender	character

1. Set the composite key as empno and deptno.
2. Add 3 rows into the table.
3. Display all the records from the above table.
4. Display the empno, name, designation and basic salary of all the employees.
5. Display empno and name of all the employees from department no. 2
6. Display empno, name, desig, department no., and basic salary in the descending order of basic pay.
7. Display all designations without duplicate values.
8. Display empno,name,desig, and basic salary in the descending order of basic pay and in the ascending order of names.
9. Sort the table in the order of basic salary.
- 10.Delete the records of employees whose basic is less than 5000.

### Question 3

Create the following tables

**Category\_details** (category\_id integer (2), category\_name varchar (10) )

**Sub\_category\_details** (sub\_category\_id integer(2), category\_id integer(2),sub\_category\_name varchar(10))

**Product\_details** (Product\_id integer (6), category\_id integer(2),sub\_category\_id integer(2), product\_name varchar(10))

Now perform the following operations:

- 1) Add a primary key constraint (without any constraint name) on column category\_id of category\_details table.
- 2) Add a primary key constraint with a constraint name on column sub\_category\_id of sub\_category\_details table.
- 3) Add a foreign key constraint with constraint name on column category\_id of sub\_category\_details table referencing category\_id of category\_details table.
- 4) For product\_details table add primary key constraint on product\_id. Also add foreign key constraint on category\_id and sub\_category\_id columns referencing category\_details(category\_id) and sub\_category\_details(sub\_category\_id). Give appropriate names for all constraints.
- 5) Add a new column (price numeric(6,2)) to product\_details table
- 6) Insert four tuples in the table. (With valid data)
- 7) Add a new column BRANDNAME varchar(20) NOT NULL
- 8) Rename Category\_details table to Cat\_dt .