

Write your roll number and at the top of the assignment and submit in the classroom. You may submit your work typed or hand-written. Show sample outputs of your SQL commands.

1. Create the following tables by identifying the primary keys, foreign keys (if any) and other constraints. Which table should you create first? Why?

EMP

Column name	Data type	Description
EMPNO	Number	Employee number
ENAME	Varchar2	Employee name
JOB	Char	Designation
MGR	Number	Manager's Emp. Number
HIREDATE	Date	Date of joining
SAL	Number	Basic Salary
COMM	Number	Commission
DEPTNO	Number	Department Number

DEPT

Column name	Data type	Description
DNO	Number	Department number
DNAME	Varchar2	Department name
LOC	Varchar2	Location of department

2. Add a new attribute Phone to table EMP.
3. Change the data type of attribute Job from char to varchar2.
4. Remove the attribute Phone from table EMP.
5. Describe the tables.
6. Insert the following data into the tables. Which data should you insert first?

Data for EMP table

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	Smith	Clerk	7902	17-12-1980	800	100	20
7499	Allen	Salesman	7698	20-02-1981	1600	300	30
7521	Ward	Salesman	7698	22-02-1981	1250	100	30
7566	Jones	Manager	7839	02-04-1981	2975	300	20
7654	Martin	Salesman	7698	28-09-1981	1250	200	30
7698	Blake	Manager	7839	01-05-1981	2850	400	30
7782	Clark	Manager	7839	09-06-1981	2450	200	10
7788	Scott	Analyst	7566	09-12-1982	3000	400	20
7839	King	President		17-11-1981	5000	500	10

7844	Turner	Salesman	7698	08-09-1981	1500	100	30
7876	Adams	Clerk	7788	12-01-1983	1100	100	20
7900	James	Clerk	7698	03-12-1981	950	100	30
7902	Ford	Analyst	7566	04-12-1981	3000	200	20
7934	Miller	Clerk	7782	23-01-1982	1300	100	10

Data for DEPT table

DNO	DNAME	LOC
10	Accounting	New York
20	Research	Dallas
30	Sales	Chicago
40	Operations	Boston

7. Display all records in the tables.
8. Display the details of all employees who get a salary more than 2000.
9. Display the names and jobs of all employees whose name begin with 'S'.
10. Display the employee numbers, names, jobs and salaries of all employees who work as clerk but get a salary less than 1000.
11. Find the sum of all salaries being paid.
12. Find the largest commission being paid.
13. Display department wise average salary being paid.
14. Display names, jobs and commissions of employees whose commissions are between 1000 and 2000 (both inclusive).
15. Display job wise maximum and minimum salaries being paid.
16. Display the details of the employees whose names begin with 'B' to 'G'.