ASSIGNMENT 2

DEPTNO	DNAME	LOC
10	ACCOUNTS	BANGALORE
20	IT	DELHI
30	PRODUCTION	CHENNAI
40	SALES	HYD
50	ADMN	LONDON
NULL	NULL	NULL

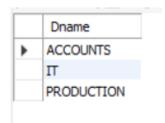| EMPNO	ENMAE	SAL	HIRE_DATE	COMMISSION	DEPTNO	MGR
1001	SACHIN	19000	1980-01-01	2100	20	1003
1002	KAPIL	15000	1970-01-01	2300	10	1003
1003	STEFEN	12000	1990-01-01	500	20	1007
1004	WILLIAMS	9000	2001-01-01	NULL	30	1007
1005	JOHN	5000	2005-01-01	NULL	30	1006
1006	DRAVID	19000	1985-01-01	2400	10	1007
1007	MARTIN	21000	2000-01-01	1040	NULL	NULL

1. Select employee details of dept number 10 or 30

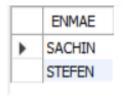   SELECT * FROM EMP WHERE DEPTNO=10 OR 30;

EMPNO	ENMAE	SAL	HIRE_DATE	COMMISSION	DEPTNO	MGR
1002	KAPIL	15000	1970-01-01	2300	10	1003
1006	DRAVID	19000	1985-01-01	2400	10	1007
1004	WILLIAMS	9000	2001-01-01	NULL	30	1007
1005	JOHN	5000	2005-01-01	NULL	30	1006

2. Write a query to fetch all the dept details with more than 1 Employee.

   SELECT DNAME FROM DEPT WHERE DEPTNO IN (SELECT DEPTNO FROM EMP GROUP BY DEPTNO HAVING COUNT(*) >1);

Dname
ACCOUNTS
IT
PRODUCTION

3. Write a query to fetch employee details whose name starts with the letter "S"

   SELECT ENAME FROM EMP WHERE ENAME LIKE ('S%') ;

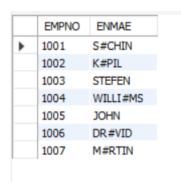| ENMAE |
|-------|
| SACHIN |
| STEFEN |

4. Select Emp Details Whose experience is more than 2 years

SELECT * FROM EMP WHERE
TIMESTAMPDIFF(YEAR,HIRE_DATE,CURRENT_DATE) > 2;

EMPNO	ENMAE	SAL	HIRE_DATE	COMMISSION	DEPTNO	MGR
1001	SACHIN	19000	1980-01-01	2100	20	1003
1002	KAPIL	15000	1970-01-01	2300	10	1003
1003	STEFEN	12000	1990-01-01	500	20	1007
1004	WILLIAMS	9000	2001-01-01	NULL	30	1007
1005	JOHN	5000	2005-01-01	NULL	30	1006
1006	DRAVID	19000	1985-01-01	2400	10	1007
1007	MARTIN	21000	2000-01-01	1040	NULL	NULL

5. Write a SELECT statement to replace the char "a" with "#" in Employee Name (Ex: **Sachin** as **S#chin)**

SELECT EMPNO,REPLACE(ENAME,'A','#') AS ENAME FROM EMP;

EMPNO	ENMAE
1001	S#CHIN
1002	K#PIL
1003	STEFEN
1004	WILLI#MS
1005	JOHN
1006	DR#VID
1007	M#RTIN

6. Write a query to fetch employee name and his/her manager name.

SELECT E.ENMAE,M.ENMAE FROM EMP AS EMP INNER JOIN E AS M ON
E.EMPNO=M.MGR;

ENMAE	ENMAE
STEFEN	SACHIN
STEFEN	KAPIL
MARTIN	STEFEN
MARTIN	WILLIAMS
DRAVID	JOHN
MARTIN	DRAVID

7. Fetch Dept Name , Total Salary of the Dept

SELECT DEPTNO,SUM(SAL) FROM EMP GROUP BY DEPTNO;

ENMAE	E.SAL + IFNULL(E.COMMISSION,0)
SACHIN	23000
KAPIL	18800
STEFEN	13700
DRAVID	23300
MARTIN	24140

8. Write a query to fetch **ALL** the employee details along with department name, department location, irrespective of employee existance in the department.

   SELECT * FROM EMP E,DEPT D WHERE E.DEPTNO=D.DEPTNO;

EMPNO	ENMAE	SAL	HIRE_DATE	COMMISSION	DEPTNO	MGR	DEPTNO	DNAME	LOC
1002	KAPIL	15000	1970-01-01	2300	10	1003	10	ACCOUNTS	BANGALORE
1006	DRAVID	19000	1985-01-01	2400	10	1007	10	ACCOUNTS	BANGALORE
1001	SACHIN	19000	1980-01-01	2100	20	1003	20	IT	DELHI
1003	STEFEN	12000	1990-01-01	500	20	1007	20	IT	DELHI
1004	WILLIAMS	9000	2001-01-01	NULL	30	1007	30	PRODUCTION	CHENNAI
1005	JOHN	5000	2005-01-01	NULL	30	1006	30	PRODUCTION	CHENNAI

9. Write an update statement to increase the employee salary by 10 %

   UPDATE EMP SET SAL=SAL+(SAL*10/100);

EMPNO	ENMAE	SAL	HIRE_DATE	COMMISSION	DEPTNO	MGR
1001	SACHIN	20900	1980-01-01	2100	20	1003
1002	KAPIL	16500	1970-01-01	2300	10	1003
1003	STEFEN	13200	1990-01-01	500	20	1007
1004	WILLIAMS	9900	2001-01-01	NULL	30	1007
1005	JOHN	5500	2005-01-01	NULL	30	1006
1006	DRAVID	20900	1985-01-01	2400	10	1007
1007	MARTIN	23100	2000-01-01	1040	NULL	NULL

10. Write a statement to delete employees belong to Chennai location.

    DELETE FROM EMP WHERE DEPTNO = (SELECT DEPTNO FROM DEPT WHERE LOC='CHENNAI');

EMPNO	ENMAE	SAL	HIRE_DATE	COMMISSION	DEPTNO	MGR
1001	SACHIN	19000	1980-01-01	2100	20	1003
1002	KAPIL	15000	1970-01-01	2300	10	1003
1003	STEFEN	12000	1990-01-01	500	20	1007
1006	DRAVID	19000	1985-01-01	2400	10	1007
1007	MARTIN	21000	2000-01-01	1040	NULL	NULL

11. Get Employee Name and gross salary (sal + comission) .

    SELECT E.ENMAE,E.SAL + IFNULL(E.COMMISSION,0) FROM EMP E;

ENMAE	E.SAL + IFNULL(E.COMMISSION,0)
SACHIN	23000
KAPIL	18800
STEFEN	13700
DRAVID	23300
MARTIN	24140

12. Increase the data length of the column Ename of Emp table from 100 to 250 using ALTER statement

    ALTER TABLE EMP MODIFY ENMAE VARCHAR(250);

13. Write query to get current datetime.

```sql
SELECT current_timestamp();
```

	current_timestamp()
▶	2022-11-03 01:34:53

14. Write a statement to create STUDENT table, with related 5 columns.

CREATE TABLE STUDENT(SID INT(5),SNAME VARCHAR(15),ADDRESS VARCHAR(15),MARKS INT(5),PHONENO INT(12));

	SID	SNAME	ADDRESS	MARKS	PHONENO

15. Write a query to fetch number of employees in who is getting salary more than 10000

SELECT COUNT(*) FROM EMP WHERE SAL>=10000;

	COUNT(*)
▶	5

16. Write a query to fetch minimum salary, maximum salary and average salary from emp table.

SELECT AVG(SAL),max(SAL),MIN(SAL) FROM EMP;

	AVG(SAL)	max(SAL)	MIN(SAL)
▶	18920.0000	23100	13200

17. Write a query to fetch number of employees in each location.

SELECT D.DNAME,COUNT(*) FROM EMP E,DEPT D WHERE E.DEPTNO=D.DEPTNO GROUP BY LOC;

	DNAME	COUNT(*)
▶	ACCOUNTS	2
	IT	2

18. Write a query to display emplyee names in descending order.

SELECT * FROM EMP ORDER BY ENMAE DESC;

	EMPNO	ENMAE	SAL	HIRE_DATE	COMMISSION	DEPTNO	MGR
▶	1003	STEFEN	13200	1990-01-01	500	20	1007
	1001	SACHIN	20900	1980-01-01	2100	20	1003
	1007	MARTIN	23100	2000-01-01	1040	NULL	NULL
	1002	KAPIL	16500	1970-01-01	2300	10	1003
	1006	DRAVID	20900	1985-01-01	2400	10	1007

19. Write a statement to create a new table(**EMP_BKP**) from the existing **EMP** table .

CREATE TABLE EMP_BKP AS SELECT * FROM EMP;

EMPNO	ENMAE	SAL	HIRE_DATE	COMMISSION	DEPTNO	MGR
1001	SACHIN	20900	1980-01-01	2100	20	1003
1002	KAPIL	16500	1970-01-01	2300	10	1003
1003	STEFEN	13200	1990-01-01	500	20	1007
1006	DRAVID	20900	1985-01-01	2400	10	1007
1007	MARTIN	23100	2000-01-01	1040	NULL	NULL

20. Write a query to fetch first 3 characters from employee name appended with salary.

SELECT CONCAT(SUBSTRING(ENMAE,1,3),SAL) AS NAMESAL FROM EMP;

NAMESAL
SAC20900
KAP16500
STE13200
DRA20900
MAR23100

21. Get the details of the employees whose name starts with **S.**

SELECT ENAME FROM EMP WHERE ENAME LIKE ('S%') ;
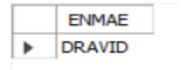
ENMAE
SACHIN
STEFEN

22. Get the details of the employees who works in Bangalore location.

SELECT ENMAE FROM EMP WHERE DEPTNO=(SELECT DEPTNO FROM DEPT WHERE LOC='BANGALORE');

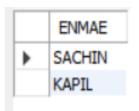| ENMAE |
|---|
| KAPIL |
| DRAVID |

23. Write the query to get the employee details whose name started within any letter between A and K.

SELECT ENMAE FROM EMP WHERE ENMAE BETWEEN 'A' AND 'K';
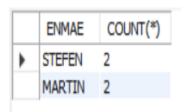
ENMAE
DRAVID

24. Write a query in SQL to display the employees whose manager name is Stefen.

SELECT ENMAE FROM EMP WHERE MGR=(SELECT EMPNO FROM EMP WHERE ENMAE='STEFEN');

	ENMAE
▶	SACHIN
	KAPIL

25. Write a query in SQL to list the name of the managers who is having maximum number of employees working under him.

SELECT M.ENMAE,COUNT(*) FROM EMP E,EMP M WHERE E.MGR=M.EMPNO GROUP BY M.ENMAE HAVING COUNT(*)=(SELECT MAX(MYCOUNT) FROM (SELECT COUNT(*)MYCOUNT FROM EMP GROUP BY MGR)A);

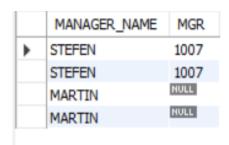|	ENMAE	COUNT(*)
▶	STEFEN	2
	MARTIN	2

26. Write a query to display the employee details, department details and the manager details of the employee who has second highest salary.

SELECT * FROM EMP WHERE SAL = (SELECT MAX(SAL) FROM EMP WHERE SAL < (SELECT MAX(SAL) FROM EMP));

	EMPNO	ENMAE	SAL	HIRE_DATE	COMMISSION	DEPTNO	MGR
▶	1001	SACHIN	20900	1980-01-01	2100	20	1003
	1006	DRAVID	20900	1985-01-01	2400	10	1007

27. Write a query to list all details of all the managers.

SELECT M.ENMAE AS MANAGER_NAME,M.MGR FROM EMP E,EMP M WHERE E.MGR = M.EMPNO;

	MANAGER_NAME	MGR
▶	STEFEN	1007
	STEFEN	1007
	MARTIN	NULL
	MARTIN	NULL

28. Write a query to list the details and total experience of all the managers.

SELECT M.ENMAE AS MANAGER_NAME,E.MGR,TIMESTAMPDIFF(YEAR,M.HIRE_DATE,CURRENT_DATE) AS EXPERIENCE FROM EMP E,EMP M WHERE E.MGR = M.EMPNO;

	MANAGER_NAME	MGR	EXPERIENCE
▶	STEFEN	1003	32
	STEFEN	1003	32
	MARTIN	1007	22
	MARTIN	1007	22

29. Write a query to list the employees who is manager and takes commission less than 1000 and works in Delhi.

SELECT * FROM EMP E WHERE E.EMPNO IN (SELECT MGR FROM EMP) AND E.COMMISSION < 1000 AND E.DEPTNO=(SELECT DEPTNO FROM DEPT WHERE LOC='DELHI');

	EMPNO	ENMAE	SAL	HIRE_DATE	COMMISSION	DEPTNO	MGR
▶	1003	STEFEN	13200	1990-01-01	500	20	1007

30. Write a query to display the details of employees who are senior to Martin.

SELECT * FROM EMP WHERE HIRE_DATE < (SELECT HIRE_DATE FROM EMP WHERE ENMAE='MARTIN');

	EMPNO	ENMAE	SAL	HIRE_DATE	COMMISSION	DEPTNO	MGR
▶	1001	SACHIN	20900	1980-01-01	2100	20	1003
	1002	KAPIL	16500	1970-01-01	2300	10	1003
	1003	STEFEN	13200	1990-01-01	500	20	1007
	1006	DRAVID	20900	1985-01-01	2400	10	1007