EMPLOYEE DATABASE

```sql
create database emp;

use emp;


CREATE TABLE dept (
  deptno decimal(2,0) primary key,
  dname varchar(14) default NULL,
  loc varchar(13) default NULL
);


CREATE TABLE emp (
  empno decimal(4,0) primary key,
  ename varchar(10) default NULL,
  mgr_no decimal(4,0) default NULL,
  hiredate date default NULL,
  sal decimal(7,2) default NULL,
  deptno decimal(2,0) references dept(deptno) on delete cascade on update cascade
);

create table incentives (
  empno decimal(4,0) references emp(empno) on delete cascade on update cascade,
  incentive_date date,
  incentive_amount decimal(10,2),
  primary key(empno,incentive_date)
  );

Create table project (
  pno int primary key,
  pname varchar(30) not null,
  ploc varchar(30)
```

```
 );

Create table assigned_to (

 empno decimal(4,0) references emp(empno) on delete cascade on update cascade,

 pno int references project(pno) on delete cascade on update cascade,

 job_role varchar(30),

 primary key(empno,pno)

 );
```

INSERT INTO dept VALUES (10,'ACCOUNTING','MUMBAI');

INSERT INTO dept VALUES (20,'RESEARCH','BENGALURU');

INSERT INTO dept VALUES (30,'SALES','DELHI');

INSERT INTO dept VALUES (40,'OPERATIONS','CHENNAI');

INSERT INTO emp VALUES (7369,'Adarsh',7902,'2012-12-17','80000.00','20');

INSERT INTO emp VALUES (7499,'Shruthi',7698,'2013-02-20','16000.00','30');

INSERT INTO emp VALUES (7521,'Anvitha',7698,'2015-02-22','12500.00','30');

INSERT INTO emp VALUES (7566,'Tanvir',7839,'2008-04-02','29750.00','20');

INSERT INTO emp VALUES (7654,'Ramesh',7698,'2014-09-28','12500.00','30');

INSERT INTO emp VALUES (7698,'Kumar',7839,'2015-05-01','28500.00','30');

INSERT INTO emp VALUES (7782,'CLARK',7839,'2017-06-09','24500.00','10');

INSERT INTO emp VALUES (7788,'SCOTT',7566,'2010-12-09','30000.00','20');

INSERT INTO emp VALUES ('7839','KING',NULL,'2009-11-17','50000.00','10');

INSERT INTO emp VALUES ('7844','TURNER',7698,'2010-09-08','15000.00','30');

INSERT INTO emp VALUES ('7876','ADAMS',7788,'2013-01-12','11000.00','20');

INSERT INTO emp VALUES ('7900','JAMES',7698,'2017-12-03','9500.00','30');

INSERT INTO emp VALUES ('7902','FORD',7566,'2010-12-03','30000.00','20');

INSERT INTO incentives VALUES(7499,'2019-02-01',5000.00);

INSERT INTO incentives VALUES(7521,'2019-03-01',2500.00);

INSERT INTO incentives VALUES(7566,'2022-02-01',5070.00);

INSERT INTO incentives VALUES(7654,'2020-02-01',2000.00);

INSERT INTO incentives VALUES(7654,'2022-04-01',879.00);

INSERT INTO incentives VALUES(7521,'2019-02-01',8000.00);

INSERT INTO incentives VALUES(7698,'2019-03-01',500.00);

INSERT INTO incentives VALUES(7698,'2020-03-01',9000.00);

INSERT INTO incentives VALUES(7698,'2022-04-01',4500.00);

INSERT INTO project VALUES(101,'AI Project','BENGALURU');

INSERT INTO project VALUES(102,'IOT','HYDERABAD');

INSERT INTO project VALUES(103,'BLOCKCHAIN','BENGALURU');

INSERT INTO project VALUES(104,'DATA SCIENCE','MYSURU');

INSERT INTO project VALUES(105,'AUTONOMUS SYSTEMS','PUNE');

INSERT INTO assigned_to VALUES(7499,101,'Software Engineer');

INSERT INTO assigned_to VALUES(7521,101,'Software Architect');

INSERT INTO assigned_to VALUES(7566,101,'Project Manager');

INSERT INTO assigned_to VALUES(7654,102,'Sales');

INSERT INTO assigned_to VALUES(7521,102,'Software Engineer');

INSERT INTO assigned_to VALUES(7499,102,'Software Engineer');

INSERT INTO assigned_to VALUES(7654,103,'Cyber Security');

INSERT INTO assigned_to VALUES(7698,104,'Software Engineer');

INSERT INTO assigned_to VALUES(7900,105,'Software Engineer');

INSERT INTO assigned_to VALUES(7839,104,'General Manager');

Select * from dept;

	deptno	dname	loc
▶	10	ACCOUNTING	MUMBAI
	20	RESEARCH	BENGALURU
	30	SALES	DELHI
	40	OPERATIONS	CHENNAI
*	NULL	NULL	NULL

select * from emp;

empno	ename	mgr_no	hiredate	sal	deptno
7369	Adarsh	7902	2012-12-17	80000.00	20
7499	Shruthi	7698	2013-02-20	16000.00	30
7521	Anvitha	7698	2015-02-22	12500.00	30
7566	Tanvir	7839	2008-04-02	29750.00	20
7654	Ramesh	7698	2014-09-28	12500.00	30
7698	Kumar	7839	2015-05-01	28500.00	30
7782	CLARK	7839	2017-06-09	24500.00	10
7788	SCOTT	7566	2010-12-09	30000.00	20
7839	KING	NULL	2009-11-17	50000.00	10
7844	TURNER	7698	2010-09-08	15000.00	30
7876	ADAMS	7788	2013-01-12	11000.00	20
7900	JAMES	7698	2017-12-03	9500.00	30
7902	FORD	7566	2010-12-03	30000.00	20
NULL	NULL	NULL	NULL	NULL	NULL

select * from incentives;

empno	incentive_date	incentive_amount
7499	2019-02-01	5000.00
7521	2019-02-01	8000.00
7521	2019-03-01	2500.00
7566	2022-02-01	5070.00
7654	2020-02-01	2000.00
7654	2022-04-01	879.00
7698	2019-03-01	500.00
7698	2020-03-01	9000.00
7698	2022-04-01	4500.00
NULL	NULL	NULL

select * from project;

pno	pname	ploc
101	AI Project	BENGALURU
102	IOT	HYDERABAD
103	BLOCKCHAIN	BENGALURU
104	DATA SCIENCE	MYSURU
105	AUTONOMUS SYSTEMS	PUNE
NULL	NULL	NULL

select * from assigned_to;

empno	pno	job_role
7499	101	Software Engineer
7499	102	Software Engineer
7521	101	Software Architect
7521	102	Software Engineer
7566	101	Project Manager
7654	102	Sales
7654	103	Cyber Security
7698	104	Software Engineer
7839	104	General Manager
7900	105	Software Engineer
NULL	NULL	NULL

1. Get Employee ID's of those employees who didn't receive incentives

   select empno from emp where empno not in (select empno from incentives);

empno
7369
7782
7788
7839
7844
7876
7900
7902
NULL

1. List the name of the managers with the most employees

   SELECT m.ename, count(*)
   FROM emp e,emp m
   WHERE e.mgr_no = m.empno
   GROUP BY m.ename
   HAVING count(*) =(SELECT MAX(mycount)
                   from (SELECT COUNT(*) mycount
                   FROM emp
                    GROUP BY mgr_no) a);

ename	count(*)
Kumar	5

1. Display those managers name whose salary is more than average salary of his employee?

```
 SELECT *
FROM emp m
WHERE m.empno IN
   (SELECT mgr_no
    FROM emp)
 AND m.sal >
   (SELECT avg(e.sal)
    FROM emp e
    WHERE e.mgr_no = m.empno );
```

empno	ename	mgr_no	hiredate	sal	deptno
7698	Kumar	7839	2015-05-01	28500.00	30
7839	KING	NULL	2009-11-17	50000.00	10
7788	SCOTT	7566	2010-12-09	30000.00	20
NULL	NULL	NULL	NULL	NULL	NULL

1. SQL Query to find the employee details who got second maximum incentive in Febrauary 2019.

```
   select *
from emp e,incentives i
where e.empno=i.empno and 2 = ( select count(*)
         from incentives j
         where i.incentive_amount <= j.incentive_amount );
```

empno	ename	mgr_no	hiredate	sal	deptno	empno	incentive_date	incentive_amount
7521	Anvitha	7698	2015-02-22	12500.00	30	7521	2019-02-01	8000.00

1. Display those employees who are working in the same dept where his manager is work. ?

```
      SELECT *
      FROM EMP E
        WHERE E.DEPTNO = (SELECT E1.DEPTNO
                    FROM EMP E1
                          WHERE E1.EMPNO=E.MGR_NO);
```

empno	ename	mgr_no	hiredate	sal	deptno
7369	Adarsh	7902	2012-12-17	80000.00	20
7499	Shruthi	7698	2013-02-20	16000.00	30
7521	Anvitha	7698	2015-02-22	12500.00	30
7654	Ramesh	7698	2014-09-28	12500.00	30
7782	CLARK	7839	2017-06-09	24500.00	10
7788	SCOTT	7566	2010-12-09	30000.00	20
7844	TURNER	7698	2010-09-08	15000.00	30
7876	ADAMS	7788	2013-01-12	11000.00	20
7900	JAMES	7698	2017-12-03	9500.00	30
7902	FORD	7566	2010-12-03	30000.00	20
NULL	NULL	NULL	NULL	NULL	NULL

1. Retrieve the employee numbers of all employees who work on project located in Bengaluru, Hyderabad, or Mysuru

   select e.empno

   from emp e, assigned_to a, project p

   where e.empno=a.empno and a.pno=p.pno and

   p.ploc in ('Bengaluru','Hyderabad','Mysuru');

empno
7499
7499
7521
7521
7566
7654
7654
7698
7839

1. Write a SQL query to find those employees whose net pay are higher than or equal to the salary of any other employee in the company
SELECT distinct e.ename FROM emp e,incentives i
WHERE (SELECT max(sal+incentive_amount)
   FROM emp,incentives) >= ANY
   (SELECT sal
   FROM emp e1
   where e.deptno=e1.deptno);

ename
Adarsh
Shruthi
Anvitha
Tanvir
Ramesh
Kumar
CLARK
SCOTT
KING
TURNER
ADAMS
JAMES
FORD