Table Name:- Employee

Empid	EmpName	Department	ContactNo	EmailId	EmpHeadId
101	Isha	E-101	1234567890	isha@gmail.com	105
102	Priya	E-104	1234567890	priya@yahoo.com	103
103	Neha	E-101	1234567890	neha@gmail.com	101
104	Rahul	E-102	1234567890	rahul@yahoo.com	105
105	Abhishek	E-101	1234567890	abhishek@gmail.com	102

Table :- EmpDept

DeptId	DeptName	Dept_off	DeptHead
E-101	HR	Monday	105
E-102	Development	Tuesday	101
E-103	Hous Keeping	Saturday	103
E-104	Sales	Sunday	104
E-105	Purchase	Tuesday	104

Table :- EmpSalary

EmpId	Salary	IsPermanent
101	2000	Yes
102	10000	Yes
103	5000	No
104	1900	Yes
105	2300	Yes

Table :- Project

ProjectId	Duration
p-1	23
p-2	15
p-3	45
p-4	2
p-5	30

Table :- EmpProject

EmpId	ProjectId	ClientID	StartYear	EndYear
101	p-1	Cl-1	2010	2010
102	p-2	Cl-2	2010	2012
103	p-1	Cl-3	2013	
104	p-4	Cl-1	2014	2015
105	p-4	Cl-5	2015	

1. Select the detail of the employee whose name start with P.

Query:

```
select * from employee where empname like 'p%';
```

Output:

Empid	EmpName	Department	ContactNo	EmailId	EmpHeadId
102	Priya	E-104	1234567890	priya@yahoo.com	103

2. How many permanent candidate take salary more than 5000.

Query:

```
select count(ispermanent) from empsalary where salary>5000;
```

Output:

count(ispermanent)
1

3. Select the detail of employee whose emailId is in gmail.

Query:

```
select * from employee where emailid like '%gmail%';
```

Output:

Empid	EmpName	Department	ContactNo	EmailId	EmpHeadId
101	Isha	E-101	1234567890	isha@gmail.com	105
103	Neha	E-101	1234567890	neha@gmail.com	101
105	Abhishek	E-101	1234567890	abhishek@gmail.com	102

4. Select the details of the employee who work either for department E-104 or E-102.

Query:

```
select * from employee where department in ('E-102','E-104');
```

Output:

Empid	EmpName	Department	ContactNo	EmailId	EmpHeadId
102	Priya	E-104	1234567890	priya@yahoo.com	103
104	Rahul	E-102	1234567890	rahul@yahoo.com	105

5. What is the department name for DeptID E-102?

Query:

```
select deptname from empdept where deptid='E-102';
```

Output:

Deptname
Development

6. What is total salary that is paid to permanent employees?

Query:

```
select sum(salary) from empsalary where ispermanent='yes';
```

Output:

sum(salary)
16200

7. List name of all employees whose name ends with a.

Query:

select * from employee where empname like '%A';

Output:

Empid	EmpName	Department	ContactNo	EmailId	EmpHeadId
101	Isha	E-101	1234567890	isha@gmail.com	105
102	Priya	E-104	1234567890	priya@yahoo.com	103
103	Neha	E-101	1234567890	neha@gmail.com	101

8. How many project started in year 2010.

Query:

select count(projectid) from empproject where startyear=2010;

Output:

Count(projectid)
2

9. How many project started and finished in the same year.

Query:

select count(projectid) as project from empproject where startyear=endyear;

Output:

project
1

10. select the name of the employee whose name's 3rd character is 'h'.

Query:

select * from employee where empname like '__h%';

Output:

Empid	EmpName	Department	ContactNo	EmailId	EmpHeadId
101	Isha	E-101	1234567890	isha@gmail.com	105
103	Neha	E-101	1234567890	neha@gmail.com	101

104	Rahul	E-102	1234567890	rahul@yahoo.com	105
105	Abhishek	E-101	1234567890	abhishek@gmail.com	102

11. Select the department name of the company which is assigned to the employee whose employee id is greater than 103.

Query:

select deptname from empdept where deptid in (select department from employee where empid >103);

Output:

Deptname
development
|hr

12.Select the name of the employee who is working under Abhishek.

Query:

select empname from employee where empheadid=(select empid from employee where empname='Abhishek');

Output:

Empname
Isha
Rahul

13.Select the name of the employee who is department head of HR.

Query:

select empname from employee where empid=(select depthead from empdept where deptname='hr');

Output:

Empname
Abhishek

14.Select the employee whose department off is Monday.

Query:

select * from employee where department in (select deptid from empdept where dept_off='monday');

Output:

Empid	EmpName	Department	ContactNo	EmailId	EmpHeadId
101	Isha	E-101	1234567890	isha@gmail.com	105
103	Neha	E-101	1234567890	neha@gmail.com	101
105	Abhishek	E-101	1234567890	abhishek@gmail.com	102

15.Select the details of all employees working in development department.

Query:

select * from employee where department in (select deptid from empdept where deptname='development');

Output:

Empid	EmpName	Department	ContactNo	EmailId	EmpHeadId
104	Rahul	E-102	1234567890	rahul@yahoo.com	105

INNER QUERIES

I. Table Name: Employee

ID	NAME	AGE	ADDRESS	SALARY
1	JOHN	20	US	2000.0
2	STEPHAN	26	DUBAI	1500.0
3	DAVID	27	BANGKOK	2000.0
4	ALINA	29	UK	6500.0
5	KATHRIN	34	BANGALORE	8500.0
6	HARRY	42	CHINA	4500.0
7	JACKSON	25	MIZORAM	10000.0

1) Write a SQL statement to display the details of employees who are getting more than 4500 as SALARY.

Query:

```
SELECT*FROM EMPLOYEE
WHERE ID IN (SELECT ID FROM
EMPLOYEE WHERE SALARY > 4500);
```

Output:

ID	NAME	AGE	ADDRESS	SALARY
4	ALINA	29	UK	6500.0
5	KATHRIN	34	BANGALORE	8500.0
7	JACKSON	25	MIZORAM	10000.0

2) Write a SQL statement to copy the complete Employee table in to newly created Employee_BKP table.

Query:

```
INSERT INTO EMPLOYEE_BKP
SELECT * FROM EMPLOYEE ;
```

ID	NAME	AGE	ADDRESS	SALARY
1	JOHN	20	US	2000.0
2	STEPHAN	26	DUBAI	1500.0
3	DAVID	27	BANGKOK	2000.0
4	ALINA	29	UK	6500.0
5	KATHRIN	34	BANGALORE	8500.0
6	HARRY	42	CHINA	4500.0
7	JACKSON	25	MIZORAM	10000.0

3) Write a SQL statement to update the Employee_BKP table in which Salary by 0.25 times in the Employee table for all employee whose Age is greater than or equal to 29.

Query:

```
UPDATE EMPLOYEE

SET SALARY = SALARY * 0.25

WHERE AGE IN (SELECT AGE FROM CUSTOMERS_BKP

WHERE AGE >= 29);
```

Output:

ID	NAME	AGE	ADDRESS	SALARY
1	JOHN	20	US	2000.0
2	STEPHAN	26	DUBAI	1500.0
3	DAVID	27	BANGKOK	2000.0
4	ALINA	29	UK	1625.0
5	KATHRIN	34	BANGALORE	2125.0
6	HARRY	42	CHINA	1125.0
7	JACKSON	25	MIZORAM	10000.0

4) Write a SQL statement to delete the records from Employee table for all Employee whose age is greater than or equal to 29.

Query:

```
DELETE FROM EMPLOYEE
WHERE AGE IN (SELECT AGE FROM EMPLOYEE_BKP
WHERE AGE >= 29 );
```

Output:

ID	NAME	AGE	ADDRESS	SALARY
1	JOHN	20	US	2000.0
2	STEPHAN	26	DUBAI	1500.0
3	DAVID	27	BANGKOK	2000.0
7	JACKSON	25	MIZORAM	10000.0

GROUP BY CLAUSE

Table Name: Officers

Officer_id	Officer_name	address	Working_hours	Date
1	Ajeet	Mau	12	2021-01-24
2	Deepika	Lucknow	10	2021-01-24
3	Vimal	Faizabad	5	2021-01-25
4	Rahul	Lucknow	4	2021-01-25
5	Ajeet	Mau	9	2021-01-26
6	Deepika	Lucknow	5	2021-01-26
7	Vimal	Faizabad	12	2021-01-27
8	Rahul	Lucknow	10	2021-01-27

1) Write a SQL statement to display how many officers are from the same city.

Query:

```
SELECT address, COUNT(*)
FROM   officers
```

```
GROUP BY address;
```

Output:

Address	COUNT(*)
Mau	**1**
Lucknow	**2**
Faizabad	**1**

2) Write a SQL statement to display officer_name and total working hours of each officers from officers table.

Query:

```
SELECT officer_name, SUM(working_hours) AS "Total working hours"
FROM officers
GROUP BY officer_name;
```

Output:

Officer_name	Total Working Hours
Ajeet	21
Deepika	15
Vimal	17
Rahul	14

3) Write a SQL statement to display minimum working hours of each officers from officer table.

Query:

```
SELECT officer_name, MIN(working_hours) AS "Minimum working hour"
FROM officers
GROUP BY officer_name;
```

Officer_name	Minimum Working Hour
Ajeet	9
Deepika	5
Vimal	5

Rahul	4

4) Write a SQL statement to display maximum working hours of each officers from officer table.

Query:

```
SELECT officer_name, MAX(working_hours) AS "Maximum working hour"
FROM officers
GROUP BY officer_name;
```

Output:

Officer_name	Maximum Working Hour
Ajeet	12
Deepika	10
Vimal	12
Rahul	10

5) Write a SQL statement to display average working hours of each officers from officer table.

Query:

```
SELECT officer_name, AVG(working_hours) AS "Avg working hour"
FROM officers
GROUP BY officer_name;
```

Output:

Officer_name	Average Working Hour
Ajeet	12.00
Deepika	10.00
Vimal	12.00
Rahul	10.00

6) Write a SQL statement to display Total working hours of each officers having more than 5 hours from officer table.

Query:

```
SELECT officer_name, SUM(working_hours) AS "Total working hours"
FROM officers
GROUP BY officer_name
HAVING SUM(working_hours) > 5;
```

Output:

Officer_name	Total Working Hours
Ajeet	21
Deepika	15
Vimal	17
Rahul	14