1. Find the employee name who lives in Kolkata and get a salary of more than Rs.10,000/month.

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/select.html) emp\_name FROM `emp` WHERE emp\_address='Kolkata' [AND](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/logical-operators.html#operator_and) emp\_salary>10000

1. Find the employee name with salary in ascending order.

SELECT emp\_name,emp\_salary FROM `emp` ORDER BY emp\_salary;

1. Find the employee name with salary in descending order.

SELECT emp\_name,emp\_salary FROM `emp` ORDER BY emp\_salary DESC;

JOINING

INNER JOIN

1. Find the employee name w.r.t. the address where employee name should be printed in ascending order of salary for that particular city.

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/select.html) emp\_name,emp\_location,emp\_salary FROM `emp` WHERE emp\_location='kolkata' ORDER BY emp\_salary;

SELECT student1.name,student1.sub1,student1.sub2,student.address,student.gender

FROM student1

INNER JOIN student

ON student1.roll = student.roll;

LEFT JOIN

1. SELECT student1.name,sub1,sub2,address,gender

FROM student1

LEFT JOIN student

ON student1.roll = student.roll;

RIGHT JOIN

1. SELECT student1.name,sub1,sub2,address,gender

FROM student1

RIGHT JOIN student

ON student1.roll = student.roll;

FULL JOIN

1. SELECT student1.name,sub1,sub2,address,gender

FROM student1

FULL JOIN student;

1. How many department is ‘ranajit banerjee’ associated with?

SELECT emp\_name,dept\_name

FROM emp

FULL JOIN department

WHERE emp\_name='ranajit banerjee'

Aggregate functions (count,sum,max,min,avg)

1. Find the employee(s) name with maximum salary in the company.

SELECT emp\_name, MAX(emp\_salary) FROM `emp`

GROUP BY statement

1. Find the maximum salary of each city in ‘emp’ table.

SELECT emp\_name,MAX(emp\_salary),emp\_location

FROM emp

GROUP BY emp\_location

1. Find the maximum salary more than 15000 in each city

SELECT emp\_name,MAX(emp\_salary),emp\_location

FROM emp

GROUP BY emp\_location

HAVING MAX(emp\_salary)>15000

1. Find the student name, maximum role number and address for that address.

SELECT MAX(roll) AS roll\_no,name,address

FROM student

GROUP BY address

1. Find the employee name who earn same salary.

\*(will have to use subquery)

SELECT emp\_name,emp\_salary

FROM emp

WHERE emp\_salary IN(SELECT emp\_salary

FROM emp

GROUP BY emp\_salary

HAVING COUNT(emp\_salary)>1)

ORDER BY emp\_salary

SUBQUERY

1. Find the name and address of each student in ‘student’ also found in ‘student1’ table.

SELECT name,roll,address FROM student

WHERE roll IN(SELECT roll

FROM student1)

1. Find the employee name with address from ‘employee’ table whose dept. number is greater than 102 in ‘dept’ table.

SELECT emp\_name,emp\_address FROM `emp`

WHERE dept\_no IN(SELECT dept\_no

FROM `department`

WHERE dept\_no>'102')

\*Can also be done using inner join. Query below –

SELECT emp\_name,emp\_address FROM `emp`

INNER JOIN department

ON emp.dept\_no = department.dept\_no

WHERE emp.dept\_no>'102'

1. Find the employee name who earn same salary.

SELECT emp\_name,emp\_salary

FROM `emp`

WHERE emp\_salary IN(SELECT emp\_salary

FROM `emp`

GROUP BY emp\_salary

HAVING COUNT(emp\_salary)>1)

ORDER BY emp\_salary

1. Find the employee name found in both ‘emp’ and ‘department’ table.

SELECT emp\_name,emp\_degn FROM `emp`

WHERE emp\_name IN(SELECT dept\_head\_name

FROM department)

BETWEEN….AND operator

1. Find the employee name with address whose salary is between Rs.15000 to Rs.25000.

SELECT emp\_name,emp\_salary FROM `emp`

WHERE emp\_salary BETWEEN 15000 AND 25000

ORDER BY emp\_salary

IN operator

1. Find the name of students whose roll numbers are 8,11,13 from ‘student’ table.

LIKE operator

1. Find the name of the employee along with his/her salary from ‘emp’ table whose name start with ‘s’

SELECT emp\_name,emp\_salary

FROM `emp`

WHERE emp\_name LIKE 's%'

1. Find the name of the employee from ‘emp’ table whose name has 5 letters in it.

SELECT emp\_name FROM `emp`

WHERE emp\_name LIKE '\_\_\_\_\_'

ALTER TABLE statement

1. Add a new column ‘phone\_no’ in ‘student’ table

ALTER TABLE student

ADD COLUMN gender2 varchar(200)

1. Delete column ‘phone\_no2’ from ‘student’ table

ALTER TABLE student

DROP COLUMN phone\_no2

1. Modify column ‘gender’ to change column type from varchar(200) to char(200)

ALTER TABLE student

MODIFY COLUMN gender char(200)

1. Rename column ‘gender’ to ‘sex’ and change it type from char(200) to varchar(200)

ALTER TABLE student

CHANGE COLUMN gender sex varchar(200)

1. Add a new column ‘class’ [varchar(200)] in ‘student1’ table and set it as unique key

ALTER TABLE student1

ADD COLUMN class varchar(200) UNIQUE

CREATE TABLE statement

1. Create a new table called ‘parent’ with 3 attributes – roll [int(200)], name [varchar(200)], address [varchar(200)] with ‘roll’ as the primary key.

CREATE TABLE parent(roll int(200), name varchar(200), address varchar(200), PRIMARY KEY(roll))

CREATE TABLE parentschild(roll int(200),name varchar(200),FOREIGN KEY(roll)REFERENCES parent(roll))