1.

List the teachers who have NULL for their department.

select name

from teacher where dept is null ;

2.

Note the INNER JOIN misses the teachers with no department and the departments with no teacher.

SELECT teacher.name, dept.name

FROM teacher INNER JOIN dept

ON (teacher.dept=dept.id)

3.

Use a different JOIN so that all teachers are listed.

select teacher.name,dept.name

from teacher left join dept

on teacher.dept=dept.id;

4.

Use a different JOIN so that all departments are listed.

select teacher.name,dept.name

from teacher right join dept

on teacher.dept=dept.id;

5.

Use COALESCE to print the mobile number. Use the number '07986 444 2266' if there is no number given. **Show teacher name and mobile number or '07986 444 2266'**

select name,coalesce(mobile,'07986 444 2266')

from teacher;

6.

Use the COALESCE function and a LEFT JOIN to print the teacher **name** and department name. Use the string 'None' where there is no department.

select teacher.name ,coalesce(dept.name,'None')

from teacher left join dept

on teacher.dept=dept.id;

7.

Use COUNT to show the number of teachers and the number of mobile phones.

select count(name),count(mobile)

from teacher;

8.

Use COUNT and GROUP BY **dept.name** to show each department and the number of staff. Use a RIGHT JOIN to ensure that the Engineering department is listed.

select dept.name,count(teacher.name) from

teacher right join dept on teacher.dept=dept.id

group by dept.name;

9.

Use CASE to show the **name** of each teacher followed by 'Sci' if the teacher is in **dept** 1 or 2 and 'Art' otherwise.

select name,

case

when dept=1 or dept =2 then 'Sci'

else 'Art'

end "name"

from teacher;

10.

Use CASE to show the name of each teacher followed by 'Sci' if the teacher is in dept 1 or 2, show 'Art' if the teacher's dept is 3 and 'None' otherwise.

select name,

case

when dept=1 or dept =2 then 'Sci'

when dept = 3 then 'Art'

else 'None'

end "name"

from teacher;