**MySQL JOINS - Exercises, Practice, Solution**

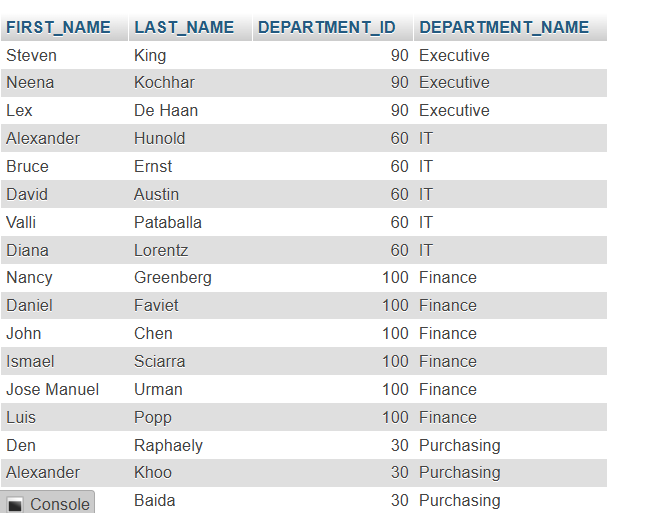
1. Write a [MySQL](https://www.w3resource.com/mysql-exercises/join-exercises/) query to find the addresses (location\_id, street\_address, city, state\_province, country\_name) of all the departments.  
   Hint : Use NATURAL JOIN.

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) LOCATION\_ID,STREET\_ADDRESS,city,STATE\_PROVINCE,COUNTRY\_NAME FROM locations NATURAL JOIN countries;



1. Write a MySQL query to find the name (first\_name, last name), department ID and name of all the employees.

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) FIRST\_NAME,LAST\_NAME,DEPARTMENT\_ID,DEPARTMENT\_NAME FROM employees JOIN departments USING (DEPARTMENT\_ID);



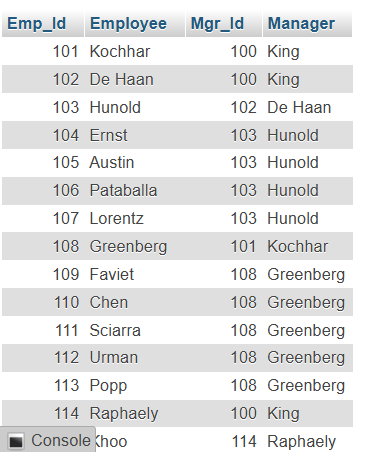
1. Write a [MySQL](https://www.w3resource.com/mysql-exercises/join-exercises/) query to find the name (first\_name, last\_name), job, department ID and name of the employees who works in London.

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) e.FIRST\_NAME, e.LAST\_NAME, e.JOB\_ID, e.DEPARTMENT\_ID, d.DEPARTMENT\_NAME FROM employees e JOIN departments d ON (e.DEPARTMENT\_ID = d.DEPARTMENT\_ID) JOIN locations l ON (d.LOCATION\_ID = l.LOCATION\_ID) WHERE LOWER(l.CITY) = 'London';



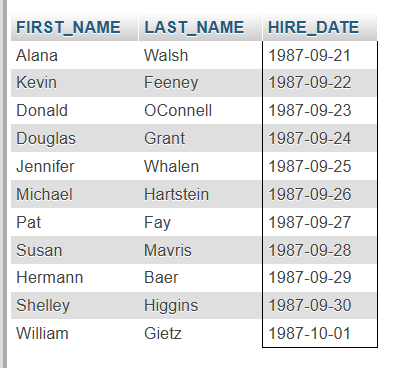
1. Write a [MySQL](https://www.w3resource.com/mysql-exercises/join-exercises/) query to find the employee id, name (last\_name) along with their manager\_id and name (last\_name).

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) e.EMPLOYEE\_ID 'Emp\_Id', e.LAST\_NAME 'Employee', m.EMPLOYEE\_ID 'Mgr\_Id', m.LAST\_NAME 'Manager' FROM employees e JOIN employees m ON (e.MANAGER\_ID = m.EMPLOYEE\_ID);



1. Write a [MySQL](https://www.w3resource.com/mysql-exercises/join-exercises/) query to find the name (first\_name, last\_name) and hire date of the employees who was hired after 'Jones'.

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) e.FIRST\_NAME, e.LAST\_NAME, e.HIRE\_DATE FROM employees e JOIN employees davies ON (davies.LAST\_NAME = 'Jones') WHERE davies.HIRE\_DATE < e.HIRE\_DATE;



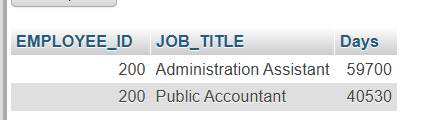
1. Write a [MySQL](https://www.w3resource.com/mysql-exercises/join-exercises/) query to get the department name and number of employees in the department.

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) DEPARTMENT\_NAME AS 'Department Name', [COUNT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/aggregate-functions.html%23function_count)(\*) AS 'No of Employees' FROM departments INNER JOIN employees ON employees.DEPARTMENT\_ID = departments.DEPARTMENT\_ID GROUP BY departments.DEPARTMENT\_ID, DEPARTMENT\_NAME ORDER BY DEPARTMENT\_NAME;



1. Write a [MySQL](https://www.w3resource.com/mysql-exercises/join-exercises/) query to find the employee ID, job title, number of days between ending date and starting date for all jobs in department 90.

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) EMPLOYEE\_ID, JOB\_TITLE, END\_DATE - START\_DATE AS Days FROM job\_history NATURAL JOIN jobs WHERE DEPARTMENT\_ID = 90;



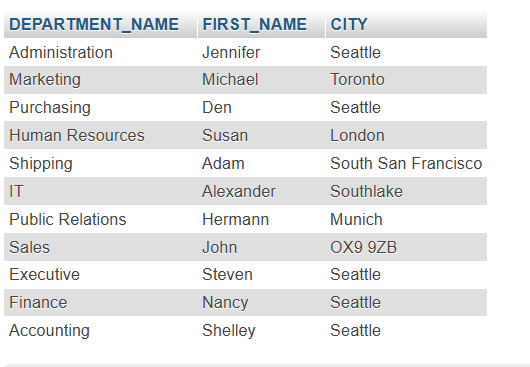
1. Write a [MySQL](https://www.w3resource.com/mysql-exercises/join-exercises/) query to display the department ID and name and first name of manager.

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) d.DEPARTMENT\_ID, d.DEPARTMENT\_NAME, d.MANAGER\_ID, e.FIRST\_NAME FROM departments d INNER JOIN employees e ON (d.MANAGER\_ID = e.EMPLOYEE\_ID);



1. Write a [MySQL](https://www.w3resource.com/mysql-exercises/join-exercises/) query to display the department name, manager name, and city.

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) d.DEPARTMENT\_NAME, e.FIRST\_NAME, l.CITY FROM departments d JOIN employees e ON (d.MANAGER\_ID = e.EMPLOYEE\_ID) JOIN locations l USING (LOCATION\_ID);



1. Write a MySQL query to display the job title and average salary of employees.

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) [AVG](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/aggregate-functions.html%23function_avg)(SALARY),JOB\_TITLE FROM employees NATURAL JOIN jobs GROUP BY JOB\_TITLE;



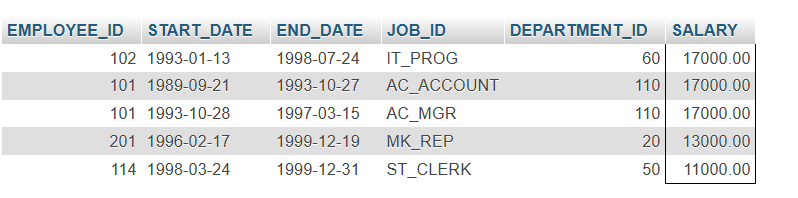
1. Write a MySQL query to display job title, employee name, and the difference between salary of the employee and minimum salary for the job.

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) FIRST\_NAME,JOB\_TITLE,SALARY-MIN\_SALARY FROM employees NATURAL JOIN jobs;



1. Write a MySQL query to display the job history that were done by any employee who is currently drawing more than 10000 of salary.

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) jh.\* ,e.SALARY FROM job\_history jh JOIN employees e ON (jh.EMPLOYEE\_ID = e.EMPLOYEE\_ID) WHERE SALARY > 10000;



1. Write a MySQL query to display department name, name (first\_name, last\_name), hire date, salary of the manager for all managers whose experience is more than 15 years.

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) FIRST\_NAME, LAST\_NAME, HIRE\_DATE, SALARY, (DATEDIFF(now(), HIRE\_DATE))/365 Experience FROM departments d JOIN employees e ON (d.MANAGER\_ID = e.EMPLOYEE\_ID) WHERE (DATEDIFF(now(), HIRE\_DATE))/365 > 15;

