# Joins, Sets, and Subqueries Practice

Use the A3 schema for these practice questions. The schema is a read only set of tables that you have access to. Remember to access these tables in your queries you’ll need to use A3.TableName.

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- Create a query to show a list of employees’ names,

what projects they’ve worked on (project names),

and each instance of them working

on those projects (date, hours worked).

This will be used for payroll.

\*/

SELECT fname, lname, projName, dateWorked, hoursWorked

FROM A3.Employee E JOIN A3.WorksOn W ON E.empno = W.empno

JOIN A3.Project P ON W.projno = P.projno;

/\*

- Some employees haven’t been entering their time right!

Their manager should be informed so that they can be "coached".

Find the employees who have null entries in the workson

table under hoursworked and list their names, dept ,

manager's name, and manager’s phone number.

List each employee only once.

\*/

SELECT DISTINCT E.fname, E.lname, E.deptno, M.fname, M.lname, M.phone

FROM A3.WorksOn W JOIN A3.Employee E ON W.empno = E.empno

JOIN A3.Department D ON E.deptno = D.deptno

JOIN A3.Employee M ON D.mgrempno = M.empno

WHERE W.hoursWorked IS NULL;\

/\*

- Determine which employee has worked the most total hours

between Nov 1st and Nov 10th inclusive and the employee which

has worked the least total hours for that date range.

For output show Employee Name (formated as "last, first"),

Total Hours, and either “Most Hours” or “Least Hours”.

\*/

SELECT lname || ', ' || fname As "Employee Name",

SUM(hoursWorked) AS "Total Hours", 'Most Hours' AS Status

FROM A3.Employee E JOIN A3.WorksOn W ON E.empno = W.empno

WHERE dateworked BETWEEN '01-NOV-10' AND '10-NOV-10'

GROUP BY lname, fname HAVING SUM(hoursWorked) =

(SELECT MAX(SUM(hoursWorked))

FROM A3.WorksOn

WHERE dateworked BETWEEN '01-NOV-10' AND '10-NOV-10'

GROUP BY empNo)

UNION

SELECT lname || ', ' || fname As "Employee Name",

SUM(hoursWorked) AS "Total Hours", 'Least Hours' AS Status

FROM A3.Employee E JOIN A3.WorksOn W ON E.empno = W.empno

WHERE dateworked BETWEEN '01-NOV-10' AND '10-NOV-10'

GROUP BY lname, fname HAVING SUM(hoursWorked) =

(SELECT MIN(SUM(hoursWorked))

FROM A3.WorksOn

WHERE dateworked BETWEEN '01-NOV-10' AND '10-NOV-10'

GROUP BY empNo);

/\*

- Determine the oldest employee for each department.

Show name, dob, deptno

\*/

SELECT fname, lname, dob, deptno FROM A3.Employee E

WHERE dob =

(SELECT MAX(dob) FROM A3.Employee E2 WHERE E.deptno = E2.deptno);

/\*

- The network admins are considering switching user names to the

first name of the user plus the first letter of their last name.

They need to see a list of first name and last name for every

employee that has at least one other employee with

that same first name.

\*/

SELECT fname, lname FROM A3.Employee

WHERE fname IN

(SELECT fname FROM A3.Employee GROUP BY fname HAVING COUNT(\*) > 1);