PROMPT -- a) Avg. salary of instructors of Physics department

SELECT AVG(salary) AS avg\_salary

FROM faculty\_info

WHERE department = 'Physics';

PROMPT -- b) department and average salary paid to instructors of each department

SELECT department, AVG(salary) AS avg\_salary

FROM faculty\_info

GROUP BY department;

PROMPT -- c) ID, Name & Department of the instructor drawing the highest salary

COLUMN id FORMAT 99999

COLUMN name FORMAT A15

COLUMN department FORMAT A12

COLUMN salary FORMAT 999999

COLUMN date\_of\_join FORMAT A10

SELECT id, name, department FROM faculty\_info WHERE salary = (SELECT MAX(salary) FROM faculty\_info);

PROMPT -- d) Number of instructors in Comp. Sci. department

SELECT COUNT(\*) AS num\_instructors

FROM faculty\_info

WHERE department = 'Comp. Sci.';

PROMPT -- e) Total credits of all courses in Comp.Sci. department

SELECT SUM(credits) AS total\_credits

FROM course

WHERE department = 'Comp. Sci.';

PROMPT -- f) Number of instructors and total salary drawn by Physics and Comp.Sci. departments

SELECT department, COUNT(\*) AS num\_instructors, SUM(salary) AS total\_salary

FROM faculty\_info

WHERE department IN ('Physics', 'Comp. Sci.')

GROUP BY department;

PROMPT -- g) Total credits of Comp.Sci. and Biology departments from course table

SELECT department, SUM(credits) AS total\_credits

FROM course

WHERE department IN ('Comp. Sci.', 'Biology')

GROUP BY department;

PROMPT -- h) Building wise total budget values

SELECT builder, SUM(budget) AS total\_budget

FROM department

GROUP BY builder;

PROMPT -- i) Number of instructors in each department

SELECT department, COUNT(\*) AS num\_instructors

FROM faculty\_info

GROUP BY department;

PROMPT -- j) Number of instructors in each department sorted high to low

SELECT department, COUNT(\*) AS num\_instructors

FROM faculty\_info

GROUP BY department

ORDER BY num\_instructors DESC;

PROMPT -- k) Number of courses offered semester-wise

SELECT semester, COUNT(DISTINCT course\_id) AS num\_courses

FROM teaches

GROUP BY semester;

PROMPT -- l) Departments with less than 2 instructors

SELECT department

FROM faculty\_info

GROUP BY department

HAVING COUNT(\*) < 2;

PROMPT -- m) Departments with 2 or more instructors (except Finance), sorted descending

SELECT department, COUNT(\*) AS num\_instructors

FROM faculty\_info

WHERE department != 'Finance'

GROUP BY department

HAVING COUNT(\*) >= 2

ORDER BY num\_instructors DESC;

PROMPT -- n) Departments with total salary > 50000

SELECT department

FROM faculty\_info

GROUP BY department

HAVING SUM(salary) > 50000;

PROMPT -- o) Total budget for buildings built by Watson

SELECT SUM(budget) AS total\_budget

FROM department

WHERE builder = 'Watson';

PROMPT -- p) Highest salary in Comp.Sci. department

SELECT MAX(salary) AS highest\_salary

FROM faculty\_info

WHERE department = 'Comp. Sci.';