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-- 2021-3-60-016 -- Practice Queries (Lab 03) --Q1. SELECT avg(budget) AS Avg_Budget
FROM department; --Q2. SELECT max(salary),min(salary) FROM instructor; --Q3. SELECT
dept_name,avg(salary) FROM instructor GROUP BY dept_name; --Q4. SELECT
dept_name,count(id) FROM student GROUP BY dept_name ORDER BY count(id) desc; --Q5.
SELECT count(id) AS TOTAL_STUDENTS FROM student WHERE dept_name='Comp. Sci.'
OR dept_name='Elec. Eng.'; --Q6. SELECT name,count(sec_id) AS TOT_INST FROM
instructor JOIN teaches ON instructor.id=teaches.id GROUP BY name; --Q7. SELECT
course_id,count(sec_id) AS TOT_SEC FROM section WHERE semester='Spring' AND
year=2010 GROUP BY course_id; --Q8. SELECT dept_name,avg(salary) FROM instructor
GROUP BY dept_name HAVING avg(salary)>=80000; --Q9. SELECT
dept_name,avg(salary),count(id) FROM instructor GROUP BY dept_name HAVING
count(id)>=2; --Q10. SELECT dept_name,count(id) FROM student GROUP BY dept_name
HAVING count(id)>=2; --Q11. SELECT name,salary FROM instructor WHERE salary= (SELECT
max(salary)FROM instructor); --Q12. SELECT dept_name FROM student GROUP BY
dept_name HAVING count(*)= (SELECT max(count(*))FROM student GROUP BY dept_name);
--Q13. SELECT dept_name, budget FROM department WHERE budget= (SELECT
min(budget)FROM department); --Q14. SELECT name,count(sec_id) FROM instructor
NATURAL JOIN teaches GROUP BY name HAVING count(sec_id)= (SELECT
max(count(sec_id))FROM teaches GROUP BY id); --Q15. SELECT id,name,count(i_id) FROM
instructor JOIN advisor ON instructor.id=advisor.i_id GROUP BY name,id HAVING count(i_id)=
(SELECT max(count(i_id))FROM advisor GROUP BY i_id); --Q16. SELECT DISTINCT
course_id FROM course UNION SELECT prereq_id FROM prereq; --Q17. SELECT course_id
FROM section UNION SELECT prereq_id FROM prereq; --Q18. SELECT course_id FROM
section MINUS SELECT prereq_id FROM prereq; --Q19. (SELECT course_id FROM section
UNION SELECT prereq_id FROM prereq) MINUS (SELECT course_id FROM section
INTERSECT SELECT prereq_id FROM prereq); --Q20. SELECT prereq_id FROM prereq
INTERSECT SELECT course_id FROM section WHERE(year=2009 AND semester='Fall') OR
(year=2010 AND semester='Spring');

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