

1. Provide the complete info on all employees. *(provide only the script)*

A: SELECT * FROM employee;

2. What is the count of all employees?

A: 9

3. What is the count of all departments?

A: 3

4. Names of employees that work for Department # 4.

A: Richard Marini, Jennifer Wallace, Ahmad Jabbar, Alicia Zelaya

5. Name of projects in Sugarland

A: 'ProductY'

6. Employees name and hours information *(provide only the script)*

**A: SELECT CONCAT(Fname, ' ', Minit, ' ', Lname) AS employee_name,
employee.SSN, SUM(works_on.hours)**

FROM employee

JOIN works_on ON employee.SSN = works_on.essn

GROUP BY employee.SSN, employee_name;

7. Employees name that don't work on Project ProductX

A: John Smith, Franklin Wong, Joyce English, Richard Marini, Ramesh Narayan, James Borg, Jennifer Wallace, Ahmad Jabbar, Alicia Zelaya.

8. Who worked the most hours? the least hours?

A: Most Hours - John B Smith (40 hrs)

Least Hours - James E Borg (0 hrs)

9. Who worked the most hours in the Research dept?

A: John B Smith, Franklin T Wong, Joyce A English, Ramesh K Narayan

10. Names of dependents for person who worked most hours in Research dept.

A: Alice, Elizabeth, Michael, Theodore, Joy

11. Provide the name of projects in either Department number 4 or 5

A: Computerization, NewBenefits, ProductX, ProductY, ProductZ

12. Provide the names of employees with either a son or wife dependent

A: John B Smith, Franklin T Wong

13. Provide the names of employees with salary between \$5k and \$30k

A: John B Smith, Joyce English, Ahmad Jabbar, Alicia Zelaya

14. Provide the names of employees that worked between 30 and 40 hours

A: John B Smith, Franklin T Wong, Joyce A English, Ramesh K Narayan, Jennifer S Wallace, Ahmad V Jabbar, Alicia J Zelaya

15. Provide the department name and project name for projects in Houston, Sugarland, or Stafford

A: Dept Names: Research, Administration, Headquarters

Project Names: ProductY, ProductZ, Computerization, Reorganization, NewBenefits

16. Provide employees with A in First Name

A: Franklin, Richard, Ramesh, James, Ahmad, Alicia.

17. Provide employees with Last Name that does not begin with W

A: John Smith, Joyce English, Richard Marini, Ramesh Narayan, James Borg, Ahmad Jabbar, Alicia Zelaya

18. Provide employees with 'a' as the second letter

A: Ramesh, James

19. What is the average hours worked for employees in the Research department?

A: 20 hours

20. What is the total salary for employees that worked on either Product Z or X?

A: \$133,000

21. Name of employees who first name start with A and order last name alphabetically?

A: Ahmad, Alicia

22. Name of employees in Department number 5 and salary ordered largest to smallest?

A: Franklin Wong, Ramesh Narayan, John Smith, Joyce English

23. Sort employee birthdates from oldest to newest and then sort first names in alphabetical order

A: SELECT employee.bdate, employee.Fname

FROM employee

ORDER BY employee.bdate DESC, employee.Fname ASC;

24. Sort employee salaries by largest to smallest and employee last names alphabetically

**A: SELECT employee.Lname, employee.salary
FROM employee
ORDER BY employee.salary DESC, employee.Lname ASC;**

25. How many male and female employees are there?

A: Male - 6 Female - 3

26. How many male and female dependents are there?

A: Male - 3 Female - 4

27. How many projects are there for each location?

A: Bellaire - 1 Sugarland - 1 Houston - 2 Stafford - 2

28. Identify the number of projects in each location and order by most to least projects

A: Houston - 2 Stafford - 2 Bellaire - 1 Sugarland - 1

29. Identify the number of male and female employees and order from most to least

A: Male - 6 Female - 3

30. How many male and female spouses are there?

A: Male - 1 Female - 2

31. What departments pay over \$50,000 to employees?

A: Research, Administration, Headquarters

32. Provide the employee SSN and number of dependents for employees with more than 1 dependent

**A: SSN - 123456789, Dependents: 3
SSN - 333445555, Dependents: 3**

33. Provide the project locations with more than 1 project

**A: Houston, 2
Stafford, 2**

34. Get the name, birthdate, sex, and salary for each employee.

a. Modify query to get only employees born after 1960.

**A: SELECT Fname, Lname, bdate, sex, salary
FROM employee
WHERE bdate > '1960-12-31';**

b. Modify query to group by sex for those born after 1960 (remove name and salary)

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A: SELECT COUNT(bdate), sex  
FROM employee  
WHERE bdate > '1960-12-31'  
GROUP BY sex;
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c. Modify query to get the average salary for men and women employees born after 1960

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A: SELECT AVG(salary), sex  
FROM employee  
WHERE bdate > '1960-12-31'  
GROUP BY sex;
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d. Modify query to get the average salary for men and women employees born after 1960
and with an average over \$15,000 ranked from largest to smallest

```
A: SELECT AVG(salary), sex  
FROM (  
    SELECT salary, sex  
    FROM employee  
    WHERE bdate > '1960-12-31'  
) AS subquery  
GROUP BY sex  
HAVING AVG(salary) > 15000  
ORDER BY AVG(salary)
```