**Task 1:**

Display only Name and code of Employees

Query:

**select emp\_name, emp\_code from tbl\_employee;**

**Task2 :**

Count Employees in Each Department

Query:

**SELECT dept\_name, COUNT(\*) AS total\_employees**

**FROM tbl\_employee**

**GROUP BY dept\_name;**

Query 2(with department name):

**SELECT d.id,d.department\_name, COUNT(e.id) AS total\_employees**

**FROM tbl\_employee as e**

**right join tbl\_department as d ON e.dept\_name = d.id**

**GROUP BY d.id;**

Task 3:

Select Attendance Records for a Specific Date

Query:   
**SELECT \* FROM tbl\_attendance**

**WHERE attend\_date = '2020-12-31';**

TASK 4:

Get Employees with there assign leaves

Query:

**SELECT e.id, e.emp\_name,l.prorata\_annual\_leave**

**FROM tbl\_employee AS e**

**INNER JOIN tbl\_emp\_leave AS l**

**ON e.id = l.emp\_id;;**

Task 5:

Find Employees Who Took Leave on specific date

Query:

**SELECT e.emp\_name,a.emp\_code,a.attdate,a.statusin**

**FROM tbl\_dailyattendance AS a**

**INNER JOIN tbl\_employee AS e**

**ON a.emp\_code = e.emp\_code**

**WHERE attdate = '2022-04-20' AND statusin = 'Leave';**

Task 6: List Employees Who Were Absent on a Specific Date

Query:

**SELECT e.emp\_name,a.emp\_code,a.attdate,a.statusin**

**FROM tbl\_employee AS e**

**INNER JOIN tbl\_dailyattendance AS a**

**ON a.emp\_code = e.emp\_code**

**WHERE attdate = '2022-04-20' AND statusin = 'absent';**

Task 7:Get a list of employee who have resigned and get their last attendance date

Query:

**SELECT id,emp\_name,employement\_status, resign\_date AS last\_attendance**

**FROM tbl\_employee**

**WHERE employement\_status = "Resign" AND resign\_date IS NOT NULL AND resign\_date <> '';**

Task 8: Calculate Total Leave Days Taken by Each Employee

Query:

**SELECT a.emp\_code,e.emp\_name, COUNT(a.emp\_code) AS total\_leave\_days**

**FROM tbl\_employee AS e**

**INNER JOIN tbl\_dailyattendance AS a**

**ON a.`emp\_code` = e.`emp\_code`**

**WHERE statusin = 'leave'**

**GROUP BY e.emp\_code;**

Task 9: List all employees who have not taken any leave.

Query:

**SELECT e.emp\_code, e.emp\_name**

**FROM tbl\_employee AS e**

**WHERE e.emp\_code NOT IN (**

**SELECT a.emp\_code**

**FROM tbl\_dailyattendance AS a**

**WHERE a.statusin = 'leave'**

**);**

Task 10: Provide a summary of attendance by department, including total present and absent.

**Query:**

**SELECT**

**d.department\_name,**

**COUNT(CASE WHEN a.attendance\_type = 'p' THEN 1 END) AS total\_present,**

**COUNT(CASE WHEN a.statusin = 'absent' THEN 1 END) AS total\_absent**

**FROM**

**tbl\_employee AS e**

**INNER JOIN**

**tbl\_dailyattendance AS a ON a.emp\_code = e.emp\_code**

**INNER JOIN**

**tbl\_department AS d ON e.dept\_name = d.id**

**GROUP BY**

**d.department\_name;**

Task 11: Finding Designations with the Most Leave Taken

Query:

**SELECT**

**d.id,d.designation\_name,**

**COUNT(a.statusin) AS total\_leaves**

**FROM**

**tbl\_employee AS e**

**INNER JOIN**

**tbl\_dailyattendance AS a ON a.emp\_code = e.id**

**INNER JOIN**

**tbl\_designation AS d ON e.desig\_name = d.id**

**WHERE**

**a.statusin = 'leave'**

**GROUP BY**

**d.designation\_name**

**ORDER BY**

**total\_leaves DESC;**

Task 12: Analyze attendance trends present leaves and absents, by employees.

Query:

**SELECT**

**e.emp\_code,**

**e.emp\_name,**

**SUM(CASE WHEN da.attendance\_type = 'P' THEN 1 ELSE 0 END) AS present\_days,**

**SUM(CASE WHEN da.attendance\_type = 'A' THEN 1 ELSE 0 END) AS absent\_days,**

**SUM(CASE WHEN da.attendance\_type = 'L' THEN 1 ELSE 0 END) AS leave\_days**

**FROM**

**tbl\_employee e**

**LEFT JOIN**

**tbl\_dailyattendance da ON e.emp\_code = da.emp\_code**

**GROUP BY**

**e.emp\_code, e.emp\_name;**

task 13: Find employees who were absent for more than two consecutive days

**Query:  
SELECT a.emp\_code, e.emp\_name, a.attdate AS 1st\_absent,**

**a2.attdate AS 2nd\_absent**

**FROM tbl\_employee AS e**

**INNER JOIN tbl\_dailyattendance AS a ON e.emp\_code = a.emp\_code**

**INNER JOIN tbl\_dailyattendance a2 ON a.emp\_code = a2.emp\_code**

**AND a2.attdate = DATE\_ADD(a.attdate, INTERVAL 1 DAY)**

**WHERE a.attendance\_type = 'A'**

**AND a2.attendance\_type = 'A';**

Task 14: Calculate the average leave days taken per employee in each department.

Query:

**SELECT**

**d.department\_name,**

**e.emp\_code,**

**e.emp\_name,**

**AVG(CASE WHEN da.statusin = 'Leave' THEN 1 ELSE 0 END) AS avg\_leave\_days**

**FROM**

**tbl\_employee e**

**INNER JOIN**

**tbl\_department d ON e.dept\_name = d.id**

**LEFT JOIN**

**tbl\_dailyattendance da ON e.emp\_code = da.emp\_code**

**GROUP BY**

**d.department\_name, e.emp\_code, e.emp\_name;**

Task 15: Find Employees with More than 15 Leave in last year

Query:

**SELECT e.emp\_name,COUNT(da.attdate) AS emp\_leaves**

**FROM tbl\_employee AS e**

**INNER JOIN tbl\_dailyattendance AS da ON da.emp\_code = e.emp\_code**

**WHERE da.statusin = 'Leave' AND YEAR(da.attdate) = YEAR(CURDATE()) - 1**

**GROUP BY e.emp\_name**

**HAVING emp\_leaves >= 15;**

Task 16: Create a yearly attendance report that shows the total attendance and absence for each employee

Query:

**SELECT**

**e.emp\_name,**

**YEAR(da.attdate) AS attendance\_year,**

**COUNT(CASE WHEN da.statusin <> 'Absent' OR da.statusin = 'Leave' THEN 1 END) AS total\_present,**

**COUNT(CASE WHEN da.statusin = 'Absent' OR da.statusin = 'Leave' THEN 1 END) AS total\_absence**

**FROM**

**tbl\_employee AS e**

**JOIN**

**tbl\_dailyattendance AS da ON da.emp\_code = e.emp\_code**

**GROUP BY**

**e.emp\_name, attendance\_year**

**ORDER BY**

**e.emp\_name, attendance\_year;**