

1. Write a query to calculate the total salary of all employees.

```
>>
SELECT SUM(Salary) AS Total_Salary
FROM Emp;
```

2. Write a query to find the average salary of employees in each department using GROUP BY.

```
>>
SELECT DeptID, AVG(Salary) AS Avg_Salary
FROM Emp
GROUP BY DeptID;
```

3. Write a query to count the total number of employees in each department.

```
>>
SELECT D.DeptName, COUNT(E.EmpID) AS Total_Employees
FROM Department D
LEFT JOIN Emp E ON D.DeptID = E.DeptID
GROUP BY D.DeptName;
```

4. Write a query to display departments having more than 5 employees using HAVING clause.

```
>>
INSERT INTO Emp (EmpID, EmpName, DeptID, Salary, Job, City, JoiningDate)
VALUES
(105, 'Amit', 20, 48000, 'HR ', 'Delhi', '2021-07-20'),
(106, 'Ritu', 20, 50000, 'HR ', 'Delhi', '2021-09-18'),
(107, 'Nisha', 20, 52000, 'HR ', 'Mumbai', '2022-03-05'),
(108, 'Vikas', 20, 49000, 'HR', 'Pune', '2023-01-10');

SELECT DeptID, COUNT(*) AS Total_Employees
FROM Emp
GROUP BY DeptID
HAVING COUNT(*) > 2;
```

5. Write a query to list distinct department locations from the Dept table.

```
>>
SELECT DISTINCT Location FROM Department;
```

6. Write a query to display the highest salary among all employees. Write a query to display all total number of employee in table.

```
>>
SELECT COUNT(*) AS Total_Employees
FROM Emp;
```

7. Write a query to find employees whose name starts with 'A' using LIKE operator.

```
>>
SELECT *
FROM Emp
WHERE EmpName LIKE 'A%';
```

8. Write a query to find employees whose name ends with 'n' using LIKE operator.

```
>>
SELECT *
FROM Emp
```

```
WHERE EmpName LIKE '%n';
```

9. Write a query to find employees whose name contains 'ra' using LIKE operator.

```
>>
```

```
SELECT *  
FROM Emp  
WHERE EmpName LIKE '%ra%';
```

10. Write a query to display all employees sorted by their Salary in descending order.

```
>>
```

```
SELECT *  
FROM Emp  
ORDER BY Salary DESC;
```

11. Write a query to display all employees sorted by DeptID ascending and then Salary descending.

```
>>
```

```
SELECT *  
FROM Emp  
ORDER BY DeptID ASC, Salary DESC;
```

12. Write a query to find employees whose salary is between 30,000 and 60,000

```
>>
```

```
SELECT *  
FROM Emp  
WHERE Salary BETWEEN 30000 AND 60000;
```

13. Write a query to display all employees whose DeptID is in (10, 20, 30).

```
>>
```

```
SELECT *  
FROM Emp  
WHERE DeptID IN (10, 20, 30);
```

14. Write a query to display Min salary of employee

```
>>
```

```
SELECT MIN(Salary) AS Min_Salary  
FROM Emp;
```

15. Write a query to display employees whose JoiningDate is between '2020-01-01' and '2021-12-31'.

```
>>
```

```
SELECT *  
FROM Emp  
WHERE JoiningDate BETWEEN '2020-01-01' AND '2021-12-31';
```

16. Write a query to display employees whose Salary is NULL.

```
>>SELECT *
```

```
FROM Emp  
WHERE Salary IS NULL;
```

17. Write a query to display employees whose Salary is NOT NULL.

```
>>
```

```
SELECT *  
FROM Emp  
WHERE Salary IS NOT NULL;
```

18. Write a query to calculate the total salary per department, but only for departments where total salary is greater than 1,00,000 (use HAVING).

```
>>SELECT DeptID, SUM(Salary) AS Total_Salary  
FROM Emp  
GROUP BY DeptID  
HAVING SUM(Salary) > 100000;
```

19. Write a query to display all distinct employee names.

```
>>  
SELECT DISTINCT EmpName  
FROM Emp;
```

20. Write a query to count the number of departments having the same location.

```
>>  
SELECT city, COUNT(*) AS Dept_Count  
FROM emp  
GROUP BY city;
```