**Module 06 - Answers :-**

1. Get all employee details from the employee table

select \* from Employees;

2. Get First\_Name, Last\_Name from employee table

select first\_name, last\_name from Employees;

3. Get First\_Name from employee table in upper case

select UPPER(first\_name) from Employees;

4. Get First\_Name from employee table in lower case

select LOWER(first\_name) from Employees;

5. Get unique DEPARTMENT from employee table

select DISTINCT department from Employees;

6. Select first 3 characters of FIRST\_NAME from EMPLOYEE

select left(first\_name, 3) as first\_three\_chars from Employees;

7. Get position of 'o' in name 'John' from employee table

select position('o' in first\_name)

from Employees

where first\_name = 'John';

8. Get FIRST\_NAME from employee table after removing white spaces from right side

select rtrim(first\_name)

from Employees;

9. Get FIRST\_NAME from employee table after removing white spaces from left side

select ltrim(first\_name)

from Employees;

10. Get length of FIRST\_NAME from employee table

select length(first\_name) from Employees;

11. Get First\_Name from employee table after replacing 'o' with '$'

select replace(first\_name, 'o', '$')

from Employees;

12. Get First\_Name and Last\_Name as single column from employee table separated by a '\_'

select concat(first\_name, '\_', last\_name) as full\_name

from Employees;

13. Get FIRST\_NAME ,Joining year,Joining Month and Joining Date from employee table

select

first\_name,

year(joining\_date) as joining\_year,

month(joining\_date) as joining\_month,

day(joining\_date) as joining\_date

from Employees;

14. Get all employee details from the employee table order by First\_Name Ascending

select \*

from Employees

order by first\_name asc;

15. Get all employee details from the employee table order by First\_Name descending

select \*

from Employees

order by first\_name desc;

16. Get all employee details from the employee table order by First\_Name Ascending and Salary descending

select \*

from Employees

order by

first\_name asc,

salary desc;

17. Get employee details from employee table whose employee name is “John”

select \* from Employees where first\_name = "John";

18. Get employee details from employee table whose employee name are “John” and “Roy”

select \* from Employees where first\_name in ("John","Roy");

19. Get employee details from employee table whose employee name are not “John” and “Roy”

select \* from Employees where first\_name not in ("John","Roy");

20. Get employee details from employee table whose first name ends with 'n' and name contains 4 letters

select \* from Employees

where first\_name like '\_\_\_n';

21. Get employee details from employee table whose first name starts with 'J' and name contains 4 letters

select \* from Employees

where first\_name like 'J\_\_\_';

22. Get employee details from employee table whose Salary greater than 600000

select \* from Employees where salary > 600000;

23. Get employee details from employee table whose Salary less than 800000

select \* from Employees where salary < 800000;

24. Get employee details from employee table whose Salary between 500000 and 800000

select \* from Employees where salary between 500000 and 800000;

25. Get employee details from employee table whose name is 'John' and 'Michael'

select \* from Employees

where first\_name in ( 'John', 'Michael' );

26. Get employee details from employee table whose joining year is “2013”

select \* from Employees

where year(joining\_date) = "2013";

27. Get employee details from employee table whose joining month is “January”

select \* from Employees

where month(joining\_date) = "1";

28. Get employee details from employee table who joined before January 1st 2013

select \* from Employees

where joining\_date < "2023-01-01";

29. Get employee details from employee table who joined after January 31st

select \* from Employees

where joining\_date > "2023-01-31";

30. Get Joining Date and Time from employee table

select

date(joining\_date) as Date,

time(joining\_date) as Time

from Employees;

31. Get Joining Date,Time including milliseconds from employee table

select date\_format(joining\_date, '%Y-%m-%m %h:%i:%s.%f') as joining\_dateTime

from Employees;

32. Get difference between JOINING\_DATE and INCENTIVE\_DATE from employee and incentives table

select

e.first\_name,

e.joining\_date,

i.incentive\_date,

timediff(i.incentive\_date, e.joining\_date) as timeDiff

from Employees e

inner join Incentives i on e.id = i.id;

33. Get current date

SELECT NOW();

34. Get names of employees from employee table who has '%' in Last\_Name. Tip : Escape character for special characters in a query.

SELECT first\_name, last\_name

FROM Employees

WHERE last\_name LIKE '%\%%' ESCAPE '^';

35. Get Last Name from employee table after replacing special character with white space

select replace(last\_name , '[^a-zA-Z0-9]', ' ' ) from Employees ;

36. Get department wise average salary from employee table order by salary ascending

select department, avg(salary) as avg\_sal

from Employees

group by department

order by avg\_sal asc;

37. Get department wise maximum salary from employee table order by salary ascending

select department, max(salary) as max\_sal

from Employees

group by department

order by max\_sal asc;

38. Get department wise minimum salary from employee table order by salary ascending

select department, min(salary) as max\_sal

from Employees

group by department

order by max\_sal asc;

39. Select no of employees joined with respect to year and month from employee table

select count(first\_name) as num\_of\_emp

from Employees

where year(joining\_date)=2013 and month(joining\_date)=1;

40. Select department, total salary with respect to a department from employee table where total salary greater than 800000 order by Total\_Salary descending select department, sum(salary) as Total\_Salary

from Employees

group by department

having sum(salary) > 800000

order by Total\_Salary desc;

41. Select first\_name, incentive amount from employee and incentives table for those employees who have incentives

select

e.id, e.first\_name,

i.amount

from Employees e

inner join Incentives i

on e.id = i.id;

42. Select first\_name, incentive amount from employee and incentives table for those employees who have incentives and incentive amount greater than 3000

select

e.first\_name,

i.amount

from Employees e

inner join Incentives i

on e.id = i.id

where i.amount > 3000;

43. Select first\_name, incentive amount from employee and incentives table for all employes even if they didn't get incentives

select

e.id,

e.first\_name,

i.amount

from Employees e

left join Incentives i

on e.id = i.id;

44. Select first\_name, incentive amount from employee and incentives table for all employees even if they didn't get incentives and set incentive amount as 0 for those employees who didn't get incentives.

select

e.id,

e.first\_name,

case

when i.amount is null then 0

else i.amount

end as incentive\_amt

from Employees e

left join Incentives i

on e.id = i.id;

45. Select first\_name, incentive amount from employee and incentives table for all employees who got incentives using left join

select

e.first\_name,

i.amount

from Employees e

left join Incentives i

on e.id = i.id

where i.amount is not null;

46. Select max incentive with respect to employee from employee and incentives table using sub query

select

e.id,

e.first\_name,

( select max(i.amount) from Incentives i

where i.id = e.id AND i.amount IS NOT NULL ) as max\_incentive

from Employees e

where

( select max(i.amount) from Incentives i

where i.id = e.id AND i.amount IS NOT NULL ) is not null;

47. Select TOP 2 salary from employee table

select id, first\_name, salary

from Employees

order by salary desc

limit 2;

48. Select 2nd Highest salary from employee table

select distinct salary

from Employees

order by salary desc

limit 1 offset 1;

49. Select First\_Name, LAST\_NAME from employee table as separate rows

select id, first\_name as name from Employees

union all

select id, last\_name as name from Employees;

50. Select employee details from employee table if data exists in incentive table ?

select e.\* from Employees e

inner join Incentives i

where e.id = i.id;

51. Select 20 % of salary from John , 10% of Salary for Roy and for other 15 % of salary from employee table

select id, first\_name,

case

when first\_name = 'John' then salary \* 0.2

when first\_name = 'Roy' then salary \* 0.1

else salary \* 0.15

end as Calc\_salary

from Employees;

52. Select Banking as 'Bank Dept', Insurance as 'Insurance Dept' and Services as 'Services Dept' from employee table

SELECT

CASE department

WHEN 'Banking' THEN 'Bank Dept'

WHEN 'Insurance' THEN 'Insurance Dept'

WHEN 'Services' THEN 'Services Dept'

END AS renamed\_department

FROM

Employees

WHERE

department IN ('Banking', 'Insurance', 'Services');

53. Delete employee data from employee table who got incentives in incentive table

delete from Employees

where id in (

select id from Incentives

);

54. Insert into employee table Last Name with " ' " (Single Quote - Special Character)

INSERT INTO Employees (id, first\_name, last\_name, salary, joining\_date, department)

VALUES (9, 'Alice', 'O\'Connor', 70000, '2024-02-22', 'Marketing');

55. Update incentive table where employee name is 'John'

update Incentives

set amount = 10000

where id = (

select id from Employees

where first\_name = 'John'

);