

Assignment 01 - SQL Basics

1. Select employee details of dept number 10 or 30

```
SELECT *
FROM emp
WHERE DeptNo IN (10, 30);
```

```
1  -- 1. Select employee details of dept number 10 or 30
2
3  ● SELECT *
4  FROM emp
5  WHERE DeptNo IN (10, 30);
```

[illegible]

2. Write a query to fetch all the dept details with more than 1 Employee

```
SELECT *  
FROM dept  
WHERE DeptNo IN (  
    SELECT DeptNo FROM emp  
    GROUP BY DeptNo  
    HAVING COUNT(*) > 1  
);
```

```
1      -- 2. Write a query to fetch all the dept details with more than 1 Employee  
2  
3 •    SELECT *  
4      FROM dept  
5      WHERE DeptNo IN (  
6          SELECT DeptNo  
7          FROM emp  
8          GROUP BY DeptNo  
9          HAVING COUNT(*) > 1  
10     );
```

Result Grid			
Filter Rows:			
Edit: Export/Import: Wrap Cell Content:			
	DeptNo	Dname	Loc
▶	10	Accounts	Bangalore
	20	IT	Delhi
	30	Production	Chennai
*	NULL	NULL	NULL

```
SELECT *
FROM emp
WHERE Ename LIKE 'S%';
```

FROM emp

WHERE Ename LIKE 'S%';

[illegible]

5. Write a SELECT statement to replace the char "a" with "#" in Employee Name

```
SELECT REPLACE(Ename, 'a', '#') AS Modified_Ename  
FROM emp;
```

```
1  -- 5. Write a SELECT statement to replace the char "a" with "#" in Employee Name  
2  
3  •  SELECT REPLACE(Ename, 'a', '#') AS Modified_Ename  
4  FROM emp;
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	Modified_Ename			
▶	S#chin			
	K#pil			
	Stefen			
	Willi#ms			
	John			
	Dr#vid			
	M#rtin			

6. Write a query to fetch employee name and his/her manager's name

```
SELECT e.Ename AS Employee_Name, m.Ename AS Manager_Name
FROM emp e
LEFT JOIN emp m
ON e.Mgr = m.EmpNo;
```

```
1      -- 6. Write a query to fetch employee name and his/her manager name
2
3  •   SELECT
4      e.Ename AS Employee_Name,
5      m.Ename AS Manager_Name
6  FROM emp e
7  LEFT JOIN emp m ON e.Mgr = m.EmpNo;
```

Result Grid			Filter Rows:	Export:	Wrap Cell Content:
	Employee_Name	Manager_Name			
▶	Sachin	Stefen			
	Kapil	Stefen			
	Stefen	Martin			
	Williams	Martin			
	John	Dravid			
	Dravid	Martin			
	Martin	NULL			

7. Fetch Dept Name, Total Salary of the Dept

```
SELECT d.Dname, SUM(e.Sal) AS Total_Salary
FROM dept d
LEFT JOIN emp e
ON d.DeptNo = e.DeptNo
GROUP BY d.DeptNo;
```

```
1      -- 7. Fetch Dept Name , Total Salary of the Dept
2
3  •   SELECT d.Dname, SUM(e.Sal) AS Total_Salary
4      FROM dept d
5      LEFT JOIN emp e ON d.DeptNo = e.DeptNo
6      GROUP BY d.DeptNo;
7
```

Result Grid			Filter Rows:	Export:	Wrap Cell Content:
	Dname	Total_Salary			
▶	Accounts	34000			
	IT	31000			
	Production	14000			
	Sales	NULL			
	Admn	NULL			

8. Write a query to fetch ALL the employee details along with department name, department location, irrespective of employee existence in the department.

```
SELECT e.*, d.Dname, d.Loc
FROM emp e
LEFT JOIN dept d
ON e.DeptNo = d.DeptNo;
```

```
1  /*
2    8. Write a query to fetch ALL the employee details along with department name,
3    department location, irrespective of employee existence in the department.
4  */
5
6  •  SELECT e.*, d.Dname, d.Loc
7     FROM emp e
8     LEFT JOIN dept d ON e.DeptNo = d.DeptNo;
```

Result Grid									
Filter Rows:									
Export: Wrap Cell Content:									
	EmpNo	Ename	Sal	Hire_Date	Commission	DeptNo	Mgr	Dname	Loc
▶	1001	Sachin	19000	1980-01-01	2100	20	1003	IT	Delhi
	1002	Kapil	15000	1970-01-01	2300	10	1003	Accounts	Bangalore
	1003	Stefen	12000	1990-01-01	500	20	1007	IT	Delhi
	1004	Williams	9000	2001-01-01	NULL	30	1007	Production	Chennai
	1005	John	5000	2005-01-01	NULL	30	1006	Production	Chennai
	1006	Dravid	19000	1985-01-01	2400	10	1007	Accounts	Bangalore
	1007	Martin	21000	2000-01-01	1040	NULL	NULL	NULL	NULL

9. Write an update statement to increase the employee salary by 10%

```
UPDATE emp  
SET Sal = Sal * 1.1  
WHERE EmpNo IS NOT NULL;
```

```
1      -- 9. Write an update statement to increase the employee salary by 10%  
2  
3 •    UPDATE emp  
4      SET Sal = Sal * 1.1  
5      WHERE EmpNo IS NOT NULL;  
6  
7 •    SELECT Sal FROM emp;
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	Sal			
▶	20900			
	16500			
	13200			
	9900			
	5500			
	20900			
	23100			

10. Write a statement to delete employees belong to Chennai location.

```
DELETE FROM emp
WHERE DeptNo IN (
    SELECT DeptNo
    FROM dept
    WHERE Loc = 'Chennai'
);
```

```
1      -- 10. Write a statement to delete employees belong to Chennai location.
2
3  •   DELETE FROM emp
4  ○   WHERE DeptNo IN (
5      SELECT DeptNo
6      FROM dept
7      WHERE Loc = 'Chennai'
8  );
9
10 •   SELECT * FROM emp;
```

[illegible]

11. Get Employee Name and gross salary (sal + comission)

```
SELECT Ename, Sal + Commission AS Gross_Salary  
FROM emp;
```

```
1      -- 11. Get Employee Name and gross salary (sal + comission)  
2  
3 •    SELECT Ename, Sal + Commission AS Gross_Salary  
4      FROM emp;
```

Result Grid			Filter Rows:	Export:	Wrap Cell Content:
	Ename	Gross_Salary			
▶	Sachin	23000			
	Kapil	18800			
	Stefen	13700			
	Dravid	23300			
	Martin	24140			

12. Increase the data length of the column Ename of Emp table from 100 to 250 using ALTER statement

```
ALTER TABLE emp  
MODIFY COLUMN Ename VARCHAR(250);
```

```
1  /*  
2    12. Increase the data length of the column Ename  
3    of Emp table from 100 to 250 using ALTER statement  
4  */  
5  
6  •  ALTER TABLE emp  
7    MODIFY COLUMN Ename VARCHAR(250);  
8  
9  •  DESC emp;
```

Result Grid						
		Filter Rows:			Export:	Wrap Cell Content:
	Field	Type	Null	Key	Default	Extra
▶	EmpNo	int	NO	PRI	NULL	
	Ename	varchar(250)	YES		NULL	
	Sal	int	YES		NULL	
	Hire_Date	date	YES		NULL	
	Commission	int	YES		NULL	
	DeptNo	int	YES	MUL	NULL	
	Mgr	int	YES		NULL	

13. Write query to get current datetime

```
SELECT NOW() AS Current_Datetime;
```

```
1 -- 13. Write query to get current datetime
2
3 • SELECT NOW() AS Current_Datetime;
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	Current_Datetime			
▶	2024-02-16 20:08:28			

14. Write a statement to create STUDENT table, with related 5 columns

```
CREATE TABLE STUDENT (
    SID INT PRIMARY KEY, Firstname VARCHAR(50),
    Lastname VARCHAR(50), Gender VARCHAR(10), DOB DATE );
```

```
1 -- 14. Write a statement to create STUDENT table, with related 5 columns
2
3 • CREATE TABLE STUDENT (
4     SID INT PRIMARY KEY,
5     Firstname VARCHAR(50),
6     Lastname VARCHAR(50),
7     Gender VARCHAR(10),
8     DOB DATE
9 ) ;
10
11 • DESC STUDENT;
```

Result Grid

Filter Rows:

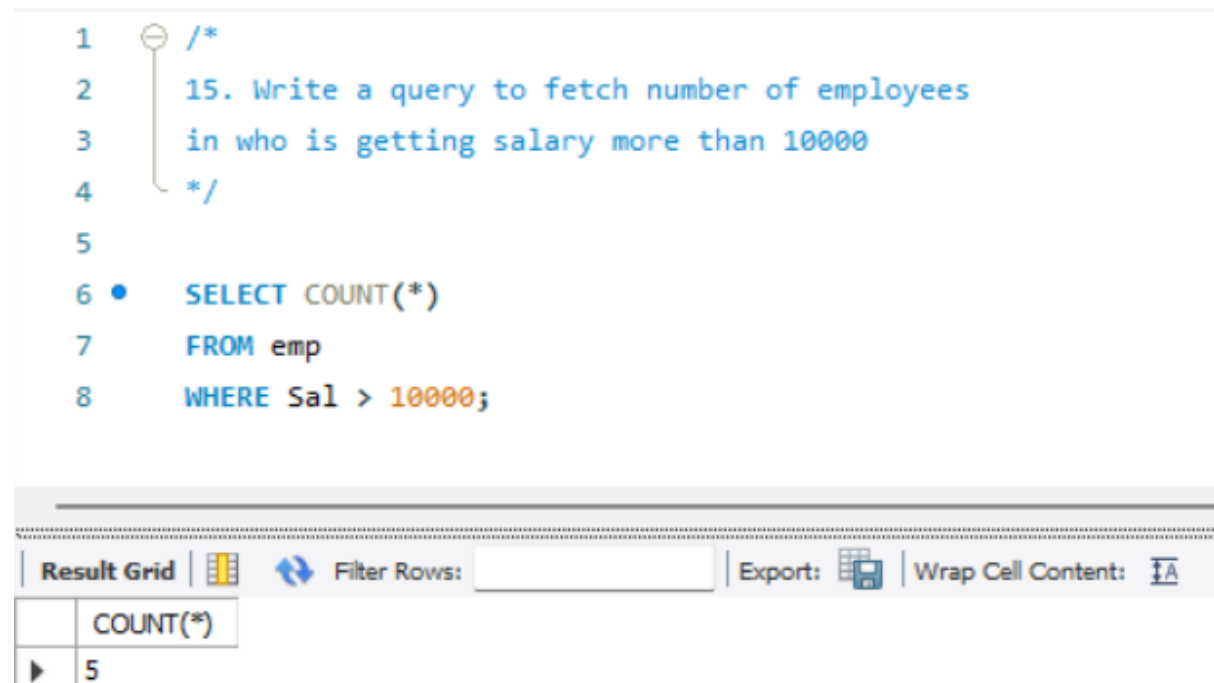
Export:

Wrap Cell Content: [IA](#)

	Field	Type	Null	Key	Default	Extra
▶	SID	int	NO	PRI	NULL	
	Firstname	varchar(50)	YES		NULL	
	Lastname	varchar(50)	YES		NULL	
	Gender	varchar(10)	YES		NULL	
	DOB	date	YES		NULL	

15. Write a query to fetch number of employees in who is getting salary more than 10000

```
SELECT COUNT(*)  
FROM emp  
WHERE Sal > 10000;
```



The screenshot shows a SQL query editor with a comment block and a query. The comment block is on lines 1-4, and the query is on lines 6-8. The query is: `SELECT COUNT(*) FROM emp WHERE Sal > 10000;`. Below the editor is a result grid with one row and one column. The column header is `COUNT(*)` and the value is `5`. The interface includes a toolbar with icons for result grid, filter rows, export, and wrap cell content.

```
1  /*  
2  15. Write a query to fetch number of employees  
3  in who is getting salary more than 10000  
4  */  
5  
6  •  SELECT COUNT(*)  
7     FROM emp  
8     WHERE Sal > 10000;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	COUNT(*)
▶	5

16. Write a query to fetch minimum salary, maximum salary and average salary from emp table.

SELECT



MIN(Sal) AS Minimum_Salary,

MAX(Sal) AS Maximum_Salary,

AVG(Sal) AS Average_Salary

FROM emp;

```
1  /*
2  16. Write a query to fetch minimum salary, maximum salary
3  and average salary from emp table.
4  */
5
6  •  SELECT
7      MIN(Sal) AS Minimum_Salary,
8      MAX(Sal) AS Maximum_Salary,
9      AVG(Sal) AS Average_Salary
10  FROM emp;
```

Result Grid			
Filter Rows: <input type="text"/>			
Export:  Wrap Cell Content: 			
	Minimum_Salary	Maximum_Salary	Average_Salary
▶	13200	23100	18920.0000

17. Write a query to fetch number of employees in each location

```
SELECT d.Loc, COUNT(*) AS Num_Emp
FROM dept d
JOIN emp e ON d.DeptNo = e.DeptNo
GROUP BY d.Loc;
```





```
1      -- 17. Write a query to fetch number of employees in each location
2
3  •    SELECT d.Loc, COUNT(*) AS Num_Emp
4      FROM dept d
5      JOIN emp e ON d.DeptNo = e.DeptNo
6      GROUP BY d.Loc;
```

Result Grid			Filter Rows:	Export:	Wrap Cell Content:
	Loc	Num_Emp			
▶	Bangalore	2			
	Delhi	2			

18. Write a query to display employee names in descending order

```
SELECT Ename  
FROM emp  
ORDER BY Ename DESC;
```

```
1      -- 18. Write a query to display employee names in descending order  
2  
3  •   SELECT Ename  
4      FROM emp  
5      ORDER BY Ename DESC;
```

Result Grid			 Filter Rows: <input type="text"/>	Export: 	Wrap Cell Content: 
	Ename				
▶	Stefen				
	Sachin				
	Martin				
	Kapil				
	Dravid				

19. Write a statement to create a new table(EMP_BKP) from the existing EMP table

```
CREATE TABLE EMP_BKP AS  
SELECT * FROM emp;
```

```
1  /*  
2    19. Write a statement to create a new table(EMP_BKP)  
3    from the existing EMP table  
4  */  
5  
6  • CREATE TABLE EMP_BKP AS  
7    SELECT * FROM emp;  
8  
9  • DESC EMP_BKP;
```

Result Grid						
		Filter Rows:			Export:	Wrap Cell Content:
	Field	Type	Null	Key	Default	Extra
►	EmpNo	int	NO		NULL	
	Ename	varchar(250)	YES		NULL	
	Sal	int	YES		NULL	
	Hire_Date	date	YES		NULL	
	Commission	int	YES		NULL	
	DeptNo	int	YES		NULL	
	Mgr	int	YES		NULL	

20. Write a query to fetch first 3 characters from employee name appended with salary.

```
SELECT CONCAT(SUBSTRING(Ename, 1, 3), '_', Sal) AS Result  
FROM emp;
```

```
1  /*  
2    20. Write a query to fetch first 3 characters from  
3    employee name appended with salary.  
4  */  
5  
6  •  SELECT CONCAT(SUBSTRING(Ename, 1, 3), '_', Sal) AS Result  
7    FROM emp;
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	Result			
▶	Sac_20900			
	Kap_16500			
	Ste_13200			
	Dra_20900			
	Mar_23100			