

Assignment-1

- 1) Select employee details of dept number 10 or 30

Query: SELECT *FROM Emp WHERE DeptNo IN (10, 30);

Output:

The screenshot shows a SQL query window with the following SQL code:

```

1  SELECT *
2  FROM Emp
3  WHERE DeptNo IN (10, 30);
4

```

Below the query, the 'Result Grid' tab is active, displaying the following data:

EmpNo	Ename	Sal	Hire_Date	Commission	DeptNo	Mgr
1002	Kapil	15000	1970-01-01	2300	10	1003
1004	Williams	9000	2001-01-01	NULL	30	1007
1005	John	5000	2005-01-01	NULL	30	1006
1006	Dravid	19000	1985-01-01	2400	10	1007

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

Query:SELECT DeptNo, Dname, Loc
FROM Dept
WHERE DeptNo IN (
SELECT DeptNo
FROM Emp
GROUP BY DeptNo
HAVING COUNT (*) >1);

Output:

The screenshot shows a SQL query window with the following SQL code:

```

1  SELECT DeptNo, Dname, Loc
2  FROM Dept
3  WHERE DeptNo IN (
4      SELECT DeptNo
5      FROM Emp
6      GROUP BY DeptNo
7      HAVING COUNT(*) > 1
8  );

```

Below the query, the 'Result Grid' tab is active, displaying the following data:

DeptNo	Dname	Loc
10	Accounts	Bangalore
20	IT	Delhi
30	Production	Chennai

- 3) Write a query to fetch employee details whose name starts with the letter “S”

QUERY:SELECT *
FROM Emp
WHERE Ename LIKE 'S%';

OUTPUT

Query 1

```

1 • SELECT *
2 FROM Emp
3 WHERE Ename LIKE 'S%';
4
5
6

```

Result Grid

EmpNo	Ename	Sal	Hire_Date	Commission	DeptNo	Mgr
1001	Sachin	19000	1980-01-01	2100	20	1003
1003	Stefen	12000	1990-01-01	500	20	1007

Result Grid
Form Editor

- 4) Select Emp Details Whose experience is more than 2 years

QUERY:SELECT *
FROM Emp
WHERE DATEDIFF (CURRENT_DATE(), Hire_Date) > 730;

OUTPUT:

Query 1

```

1 • SELECT *
2 FROM Emp
3 WHERE DATEDIFF(CURRENT_DATE(), Hire_Date) > 730;
4
5
6

```

Result Grid

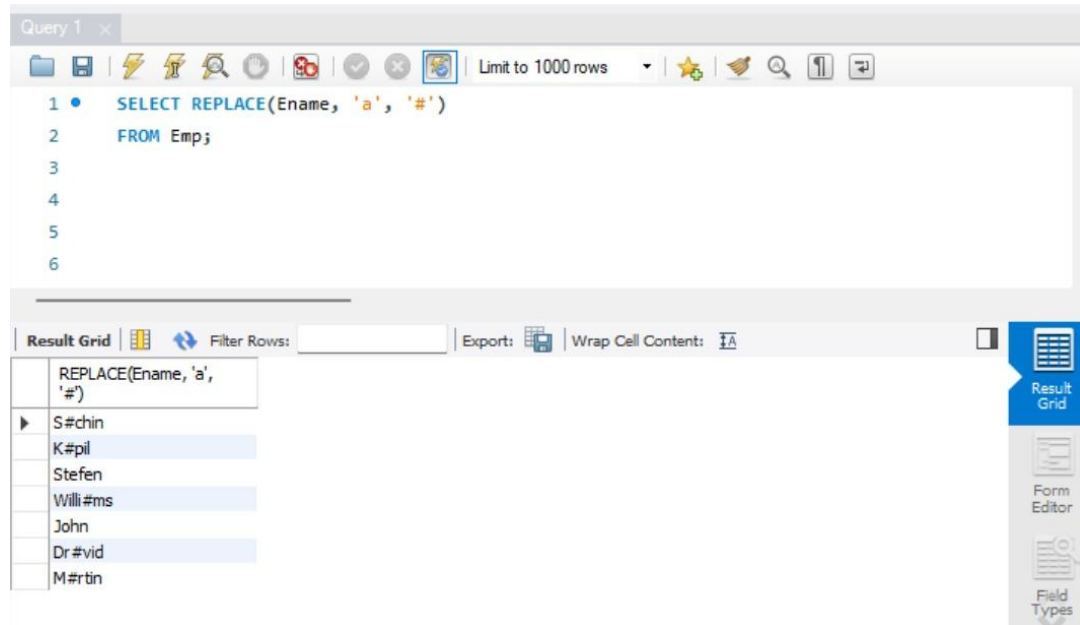
EmpNo	Ename	Sal	Hire_Date	Commission	DeptNo	Mgr
1001	Sachin	19000	1980-01-01	2100	20	1003
1002	Kapil	15000	1970-01-01	2300	10	1003
1003	Stefen	12000	1990-01-01	500	20	1007
1004	Williams	9000	2001-01-01	NULL	30	1007
1005	John	5000	2005-01-01	NULL	30	1006
1006	David	19000	1985-01-01	2400	10	1007
1007	Martin	21000	2000-01-01	1040	NULL	NULL

Result Grid
Form Editor
Field Editor

- 5) Write a SELECT statement to replace the char “a” with “#” in Employee Name (Ex: **Sachin** as **S#chin**)

Query: SELECT REPLACE(Ename,'a','#')
FROM Emp;

Output:



- 6) Write a query to fetch employee name and his/her manager name.

QUERY: SELECT e.ename AS Employee_Name, m. Ename AS Manager_Name
FROM Emp e
LEFT JOIN Emp m ON e-Mgr = m. EmpNo;

OUTPUT:

Query 1

```

1 • SELECT e.ename AS Employee_Name, m.ename AS Manager_Name
2   FROM Emp e
3   LEFT JOIN Emp m ON e.Mgr = m.EmpNo;
4
5
6

```

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

	Employee_Name	Manager_Name
▶	Sachin	Stefen
	Kapil	Stefen
	Stefen	Martin
	Williams	Martin
	John	David
	David	Martin
	Martin	NULL

Result Grid
Form Editor
Field Types

7) Fetch Dept Name , Total Salry of the Dept

QUERY: SELECT d.Dname AS Department_Name, SUM(e.Sal + COALESCE(e.Commission, 0)) AS Total_Salary
FROM Dept d
INNER JOIN Emp e ON d. DeptNo = e .DeptNo
GROUP BY d. DeptNo, d.Dname;

OUTPUT:

Query 1

```

1 • SELECT d.Dname AS Department_Name, SUM(e.Sal + COALESCE(e.Commission, 0)) AS Total_Salary
2   FROM Dept d
3   INNER JOIN Emp e ON d.DeptNo = e.DeptNo
4   GROUP BY d.DeptNo, d.Dname;
5
6

```

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

	Department_Name	Total_Salary
▶	IT	33600
	Accounts	38700
	Production	14000

Result Grid
Form Editor
Field Types

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

QUERY: SELECT e.*, d.Dname, d.Loc
FROM Emp e
LEFT JOIN Dept d ON e.DeptNo = d.DeptNo;

OUTPUT:

Query 1 x

Limit to 1000 rows

```

1 • SELECT e.*, d.Dname, d.Loc
2 FROM Emp e
3 LEFT JOIN Dept d ON e.DeptNo = d.DeptNo;
4
5
6

```

Result Grid

	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

Result Grid
Form Editor
Field Types

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

QUERY: UPDATE Emp
SET Sal = Sal * 1.1;
select * from Emp;

OUTPUT:

Query 1 x

Limit to 1000 rows

```

1 • UPDATE Emp
2 SET Sal = Sal * 1.1;
3 • select * from Emp;
4
5
6

```

Result Grid

	EmpNo	Ename	Sal	Hire_Date	Commission	DeptNo	Mgr
▶	1001	Sachin	25289	1980-01-01	2100	20	1003
	1002	Kapil	19965	1970-01-01	2300	10	1003
	1003	Stefen	15972	1990-01-01	500	20	1007
	1004	Williams	11979	2001-01-01	NULL	30	1007
	1005	John	6655	2005-01-01	NULL	30	1006
	1006	Dravid	25289	1985-01-01	2400	10	1007
	1007	Martin	27951	2000-01-01	1040	NULL	NULL

Result Grid
Form Editor

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

Query: SET SQL_SAFE_UPDATES = 0;
 DELETE FROM Emp
 WHERE DeptNo IN (SELECT DeptNo FROM Dept WHERE Loc = 'Chennai');
 Select * From Emp;

OUTPUT:

The screenshot shows a SQL query window with the following code:

```

1 • SET SQL_SAFE_UPDATES = 0;
2 • DELETE FROM Emp
3   WHERE DeptNo IN (SELECT DeptNo FROM Dept WHERE Loc = 'Chennai');
4 • Select * From Emp;
5
6

```

Below the query window is the 'Result Grid' showing the data from the 'Emp' table after the deletion. The grid has columns: EmpNo, Ename, Sal, Hire_Date, Commission, DeptNo, and Mgr.

EmpNo	Ename	Sal	Hire_Date	Commission	DeptNo	Mgr
1001	Sachin	25289	1980-01-01	2100	20	1003
1002	Kapil	19965	1970-01-01	2300	10	1003
1003	Stefen	15972	1990-01-01	500	20	1007
1006	Dravid	25289	1985-01-01	2400	10	1007
1007	Martin	27951	2000-01-01	1040	NULL	NULL

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

Query: SELECT Ename, Sal + COALESCE(Commission, 0) AS Gross_Salary
 FROM Emp;

OUTPUT:

The screenshot shows a SQL query window with the following code:

```

1 • SELECT Ename, Sal + COALESCE(Commission, 0) AS Gross_Salary
2   FROM Emp;
3
4
5
6

```

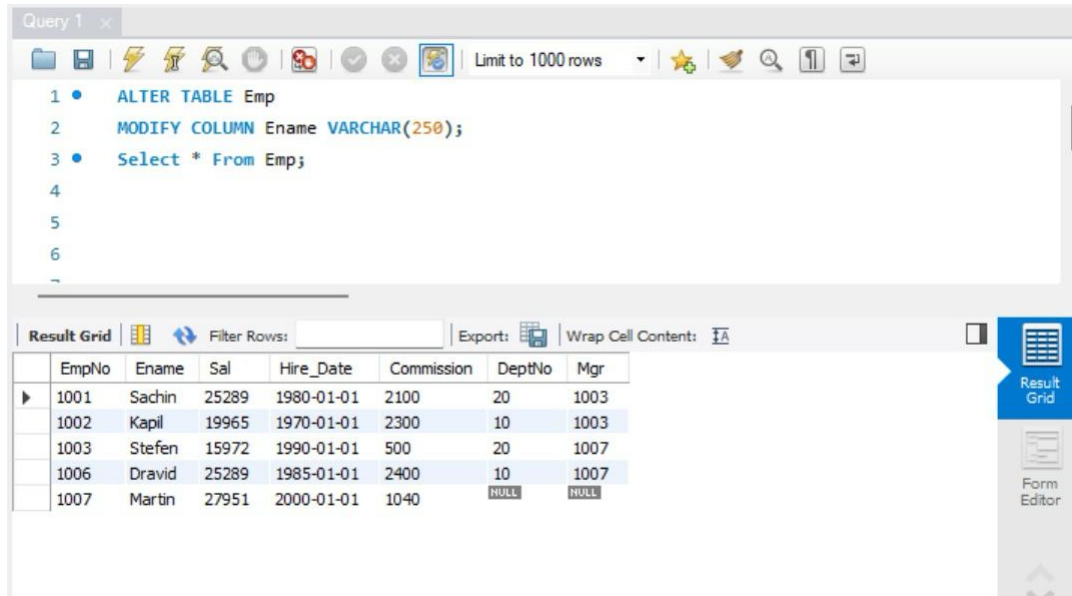
Below the query window is the 'Result Grid' showing the data from the 'Emp' table. The grid has columns: Ename and Gross_Salary.

Ename	Gross_Salary
Sachin	27389
Kapil	22265
Stefen	16472
Dravid	27689
Martin	28991

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

Query: ALTER TABLE Emp
MODIFY COLUMN Ename VARCHAR(250);
Select * From Emp;

OUTPUT:



Query 1 x

```
1 • ALTER TABLE Emp
2   MODIFY COLUMN Ename VARCHAR(250);
3 • Select * From Emp;
4
5
6
~
```

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

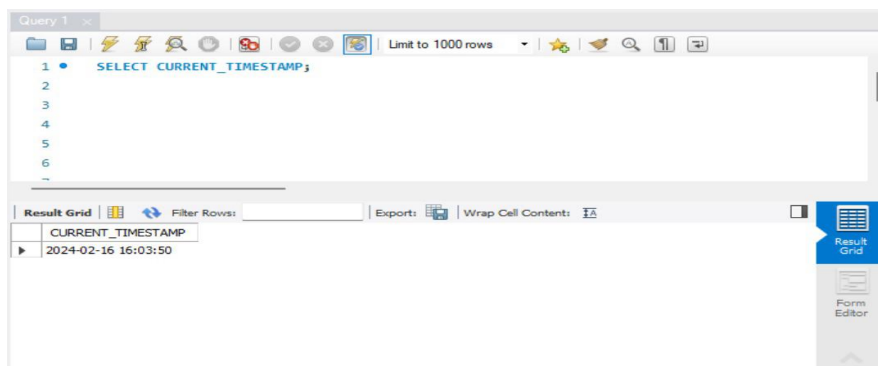
EmpNo	Ename	Sal	Hire_Date	Commission	DeptNo	Mgr
1001	Sachin	25289	1980-01-01	2100	20	1003
1002	Kapil	19965	1970-01-01	2300	10	1003
1003	Stefen	15972	1990-01-01	500	20	1007
1006	Dravid	25289	1985-01-01	2400	10	1007
1007	Martin	27951	2000-01-01	1040	NULL	NULL

Result Grid
Form Editor

- 13) Write query to get current datetime

Query: SELECT CURRENT_TIMESTAMP;

OUTPUT:



Query 1 x

```
1 • SELECT CURRENT_TIMESTAMP;
2
3
4
5
6
~
```

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

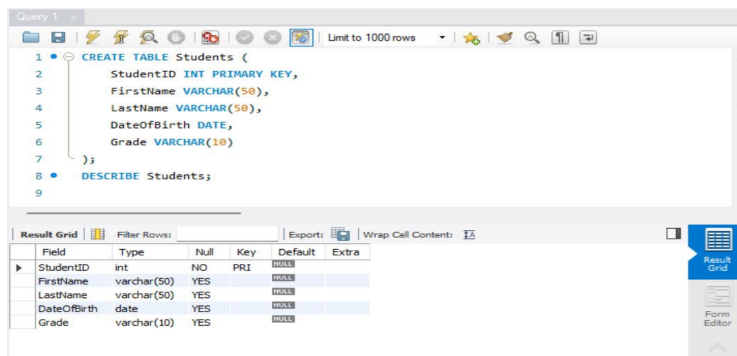
CURRENT_TIMESTAMP
2024-02-16 16:03:50

Result Grid
Form Editor

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

Query:CREATE TABLE Students (
 StudentID INT PRIMARY KEY,
 FirstName VARCHAR(50), LastName VARCHAR(50) ,
 DateOfBirth DATE,
 Grade VARCHAR(10)
)
 DESCRIBE Students;

OUTPUT:

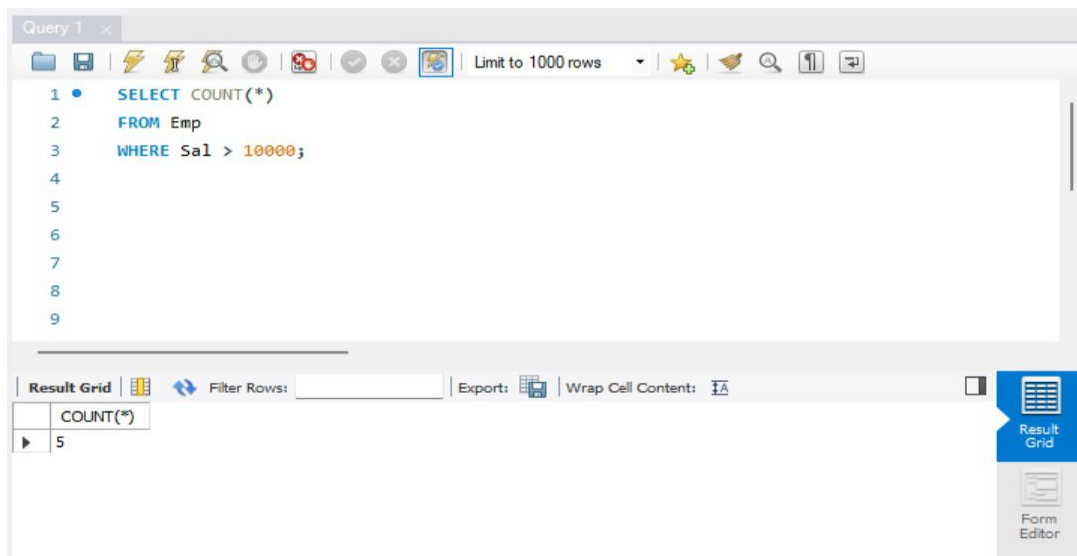


Field	Type	Null	Key	Default	Extra
StudentID	int	NO	PRI		
FirstName	varchar(50)	YES			
LastName	varchar(50)	YES			
DateOfBirth	date	YES			
Grade	varchar(10)	YES			

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

Query:SELECT COUNT (*)
 FROM Emp
 WHERE Sal > 10000;

OUTPUT:

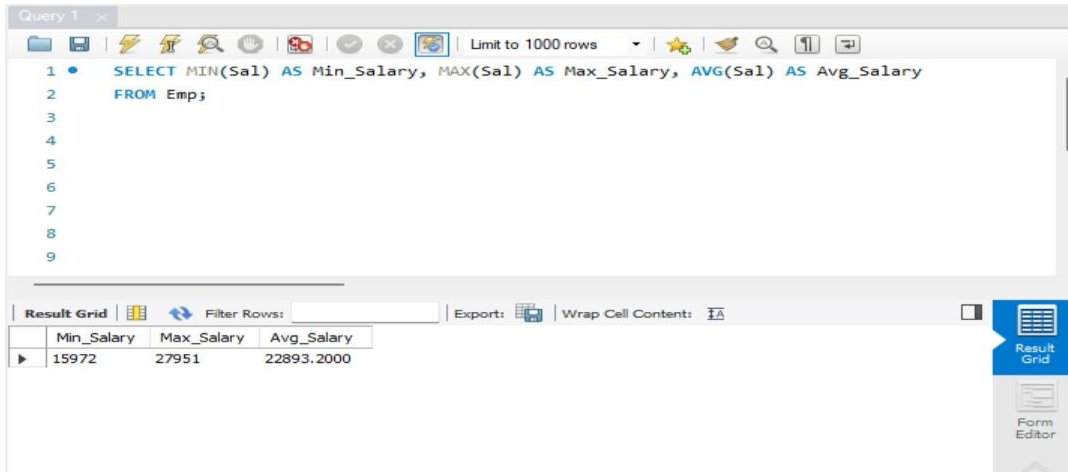


Field	Type	Null	Key	Default	Extra
COUNT(*)					
5					

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

Query:SELECT MIN(Sal) AS Min_Salary, MAX(Sal) AS Max_Salary, AVG(Sal)
AS Avg_Salary
FROM Emp;

OUTPUT:



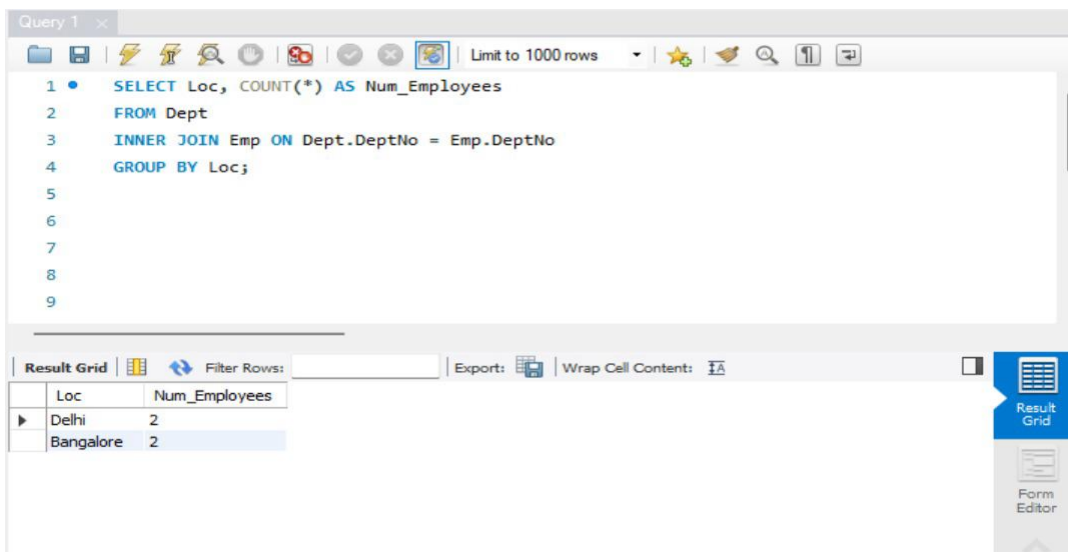
The screenshot shows a SQL query editor with a toolbar at the top. The query is: `SELECT MIN(Sal) AS Min_Salary, MAX(Sal) AS Max_Salary, AVG(Sal) AS Avg_Salary FROM Emp;`. Below the query editor is a 'Result Grid' tab. The result grid shows the following data:

Min_Salary	Max_Salary	Avg_Salary
15972	27951	22893.2000

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

Query:SELECT Loc, COUNT(*) AS Num_Employees
FROM Dept
INNER JOIN Emp ON Dept.DeptNo = Emp .DeptNo
GROUP BY Loc;

OUTPUT:



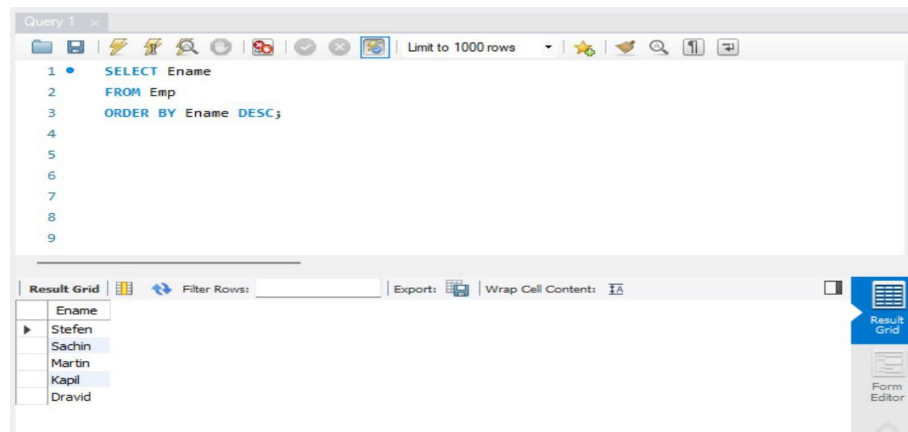
The screenshot shows a SQL query editor with a toolbar at the top. The query is: `SELECT Loc, COUNT(*) AS Num_Employees FROM Dept INNER JOIN Emp ON Dept.DeptNo = Emp .DeptNo GROUP BY Loc;`. Below the query editor is a 'Result Grid' tab. The result grid shows the following data:

Loc	Num_Employees
Delhi	2
Bangalore	2

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

Query:SELECT Ename
FROM Emp
ORDER BY Ename DESC;

OUTPUT:



The screenshot shows a query editor window titled 'Query 1' with the following SQL query:

```
1 SELECT Ename
2 FROM Emp
3 ORDER BY Ename DESC;
```

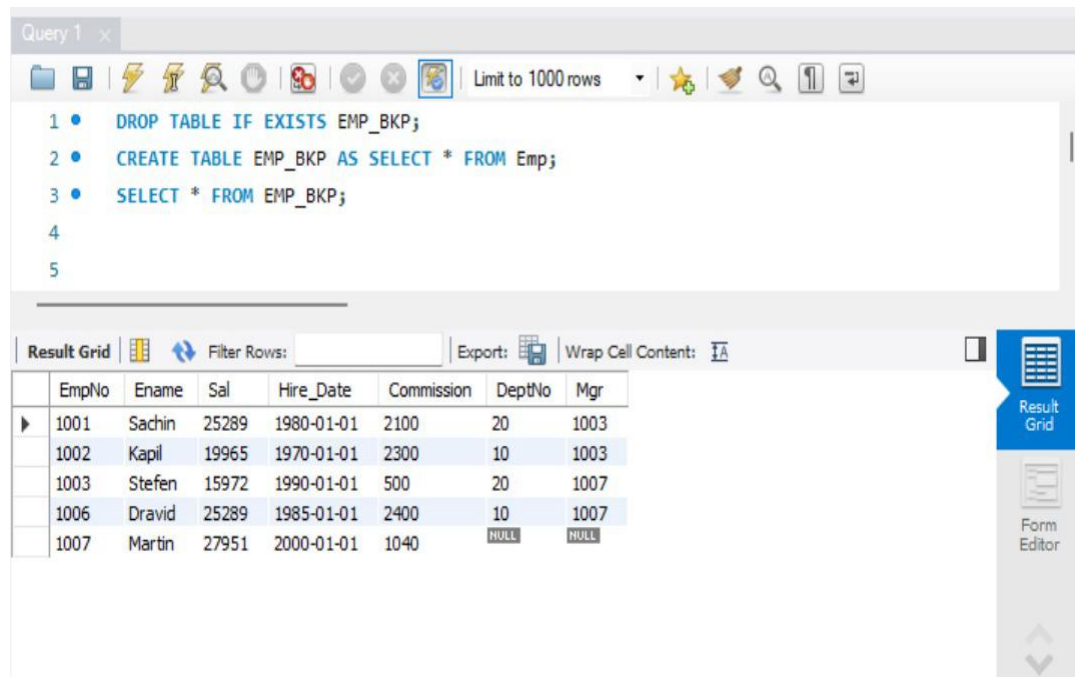
The output is displayed in a 'Result Grid' below the query editor. The grid shows the following data:

Ename
Stefen
Sachin
Martin
Kapil
Dravid

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

Query:DROP TABLE IF EXISTS EMP_BKP;
CREATE TABLE EMP_BKP AS SELECT * FROM Emp;
SELECT * FROM EMP_BKP;

OUTPUT:



The screenshot shows a query editor window titled 'Query 1' with the following SQL query:

```
1 DROP TABLE IF EXISTS EMP_BKP;
2 CREATE TABLE EMP_BKP AS SELECT * FROM Emp;
3 SELECT * FROM EMP_BKP;
```

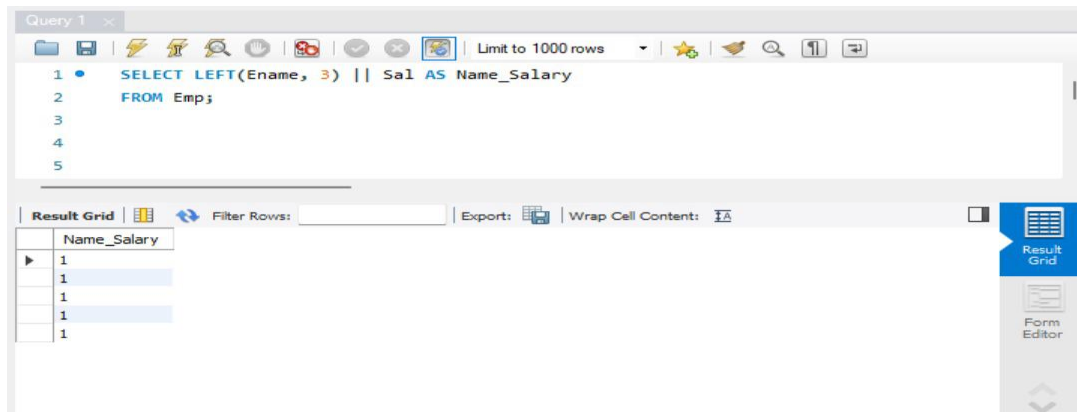
The output is displayed in a 'Result Grid' below the query editor. The grid shows the following data:

EmpNo	Ename	Sal	Hire_Date	Commission	DeptNo	Mgr
1001	Sachin	25289	1980-01-01	2100	20	1003
1002	Kapil	19965	1970-01-01	2300	10	1003
1003	Stefen	15972	1990-01-01	500	20	1007
1006	Dravid	25289	1985-01-01	2400	10	1007
1007	Martin	27951	2000-01-01	1040	NULL	NULL

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

Query: SELECT LEFT(Ename, 3) || Sal AS Name_Salary
FROM Emp;

OUTPUT:



The screenshot shows a database query editor window titled 'Query 1'. The query is: `SELECT LEFT(Ename, 3) || Sal AS Name_Salary FROM Emp;`. The output is displayed in a 'Result Grid' with 5 rows, all showing the value '1' in the 'Name_Salary' column. The interface includes a toolbar with various icons, a 'Limit to 1000 rows' dropdown, and buttons for 'Export', 'Wrap Cell Content', 'Result Grid', and 'Form Editor'.

	Name_Salary
1	1
2	1
3	1
4	1
5	1