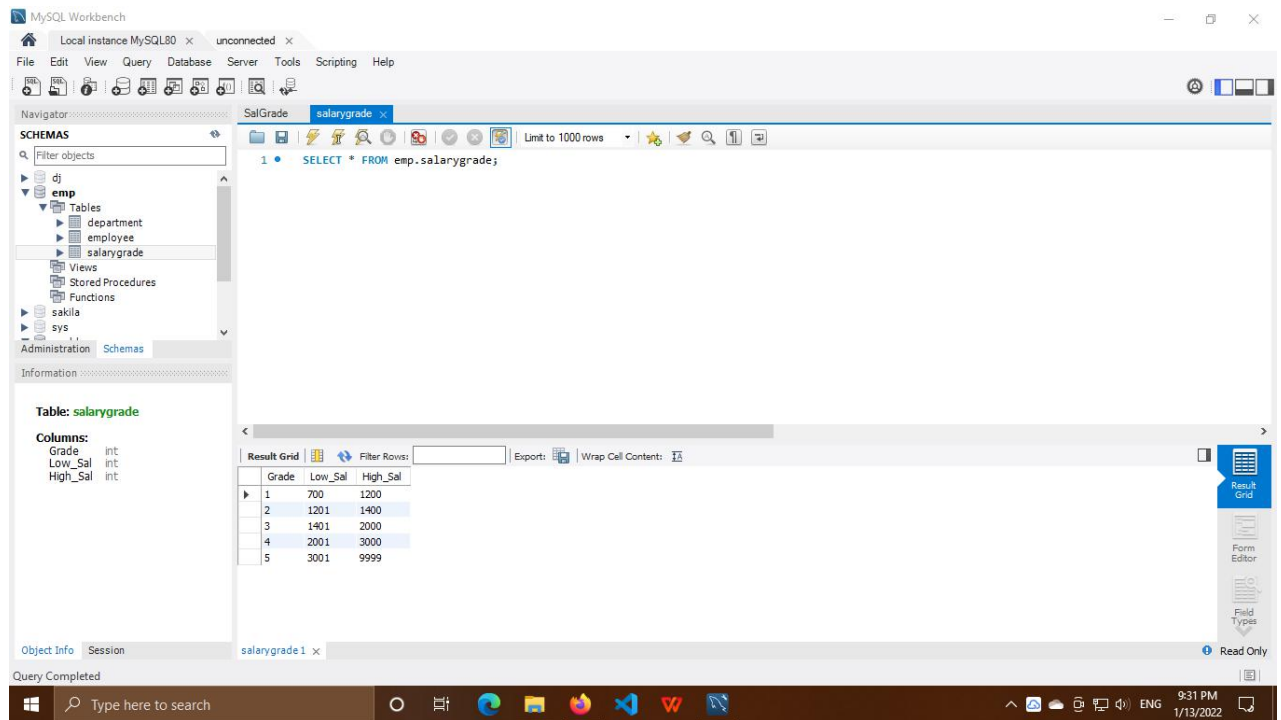


Database Technologies Assignment - 01

Rollno: 210950320034, Name: Deepankar jadhav

Q 1) Select all information from Salgrade table

`SELECT * FROM emp.salarygrade;`



The screenshot displays the MySQL Workbench interface. The left sidebar shows the 'SCHEMAS' panel with a tree view containing 'dj', 'emp', 'sakila', and 'sys'. The 'emp' schema is expanded, showing tables 'department', 'employee', and 'salarygrade'. The 'salarygrade' table is selected. The 'Information' panel shows the table's columns: 'Grade' (int), 'Low_Sal' (int), and 'High_Sal' (int). The main query editor contains the SQL statement: `SELECT * FROM emp.salarygrade;`. The 'Result Grid' at the bottom shows the output of the query, which consists of 5 rows of data.

	Grade	Low_Sal	High_Sal
1	700	1200	
2	1201	1400	
3	1401	2000	
4	2001	3000	
5	3001	9999	

Database Technologies Assignment - 01
Rollno: 210950320034, Name: Deepankar jadhav

Q2) Select all information from emp table.

```
SELECT * FROM emp.employee;
```

The screenshot shows the MySQL Workbench interface. On the left, the Navigator pane displays a tree view of the database structure, including the 'employee' table. The main area shows the 'employee' table with the following columns and data:

Employee_No	Employee_Name	Job	MGR	HireDate	Salary	Commission	Department_No
7879	ADAMS	CLERK	7788	1981-05-23	1100.00	NULL	20
7499	ALLEN	SALESMAN	7698	1981-02-20	1000.00	300.00	30
7698	BLAKE	MANAGER	7839	1981-01-05	2850.00	NULL	30
7782	CLARK	MANAGER	7839	1981-06-09	2450.00	NULL	10
7902	FORD	ANALYST	7566	1981-12-03	3000.00	NULL	20
7900	JAMES	CLERK	7698	1981-12-03	950.00	NULL	30
7566	JONES	MANAGER	7839	1981-02-04	2975.00	NULL	20
7839	KING	PRESIDENT	NULL	1981-11-17	5000.00	NULL	10
7654	MARTINE	SALESMAN	7698	1981-09-28	1250.00	1400.00	30
7934	MILLER	CLERK	7782	1981-01-23	1300.00	NULL	10
2788	SCOTT	ANALYST	7566	1981-04-19	3000.00	NULL	20
7369	SMITH	CLERK	7902	1980-12-17	800.00	NULL	20
7644	TURNER	SALESMAN	7698	1981-09-08	1500.00	NULL	20
7521	WARK	SALESMAN	7698	1981-02-22	1250.00	500.00	30
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

The bottom status bar indicates 'Query Completed'.

Database Technologies Assignment - 01
Rollno: 210950320034, Name: Deepankar jadhav

Q3) Select all information from dept table.

SELECT * FROM Department;

The screenshot shows the MySQL Workbench interface. The main editor displays a SQL script for creating a table and inserting data. The script is as follows:

```
1 • CREATE table Department(  
2   Department_No INT(2),  
3   Department_Name varchar(13),  
4   Location varchar(14),  
5   primary key (Department_No));  
6  
7 • INSERT into Department(Department_No, Department_Name, Location) values(10, "A", "New York")
```

The script is executed, and the results are shown in the 'Result Grid' tab. The results are as follows:

Department_No	Department_Name	Location
10	Accounting	New York
20	Research	Dallas
30	Sales	Chicago
40	Operations	Boston

The bottom status bar indicates that the SQL script was saved to 'D:\DBMS\Assignment01\Q3.sql'.

Database Technologies Assignment - 01
Rollno: 210950320034, Name: Deepankar jadhav

Q4)List all employees who have a salary between 1000 and 2000.

USE emp;

SELECT * FROM employee Where Salary between 1000 AND 2000;

The screenshot shows the MySQL Workbench interface. The 'Query Editor' window contains the following SQL code:

```
1 • USE emp;  
2  
3 • SELECT * FROM employee Where Salary between 1000 AND 2000;
```

The 'Result Grid' window displays the results of the query. The table has 8 columns: Employee_No, Employee_Name, Job, MGR, HireDate, Salary, Commission, and Department_No. The results are as follows:

Employee_No	Employee_Name	Job	MGR	HireDate	Salary	Commission	Department_No
7499	ALLEN	SALESMAN	7698	1981-02-20	1000.00	300.00	30
7521	WARD	SALESMAN	7698	1981-02-22	1250.00	500.00	30
7644	TURNER	SALESMAN	7698	1981-09-08	1500.00	1000.00	20
7654	MARTINE	SALESMAN	7698	1981-09-28	1250.00	1400.00	30
7879	ADAMS	CLERK	7788	1981-05-23	1100.00	1000.00	20
7934	MILLER	CLERK	7782	1981-01-23	1300.00	1000.00	10
7800	SCOTT	ANALYST	7566	1982-07-09	3000.00	1000.00	20
7566	JONES	MANAGER	7839	1981-04-02	2800.00	1000.00	20

The 'Table: employee' window shows the following columns and data types:

- Employee_No: int PK
- Employee_Name: varchar(10)
- Job: varchar(9)
- MGR: int
- HireDate: date
- Salary: double(7,2)
- Commission: double(7,2)
- Department_No: int

Database Technologies Assignment - 01
Rollno: 210950320034, Name: Deepankar jadhav

Q5) List department numbers and names in department name order.

SELECT Department_No, Department_Name FROM emp.department order by Department_Name;

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL query:

```
1 • artment_Name FROM emp.department order by Department_Name;
```

The left sidebar shows the 'SCHEMAS' panel with a tree view of the database structure. The 'emp' schema is selected, showing tables: department, employee, salarygrade, and views. The 'Information' panel shows details for the 'department' table:

Table: department
Columns:
Department_No int PK
Department_Name varchar(13)
Location varchar(14)

The 'Result Grid' at the bottom displays the query results:

Department_No	Department_Name
10	Accounting
40	Operations
20	Research
30	Sales
NULL	NULL

The status bar at the bottom indicates 'Query Completed' and the system time is 11:56 PM on 1/13/2022.

Database Technologies Assignment - 01
Rollno: 210950320034, Name: Deepankar jadhav

Q6) Display all the different job types.

SELECT distinct Job FROM emp.employee;

The screenshot shows the MySQL Workbench interface. The query editor contains the SQL statement: `1. SELECT distinct Job FROM emp.employee;`. The left sidebar shows the 'SCHEMAS' panel with a tree view of the database structure. The 'emp' schema is expanded, showing tables: 'department', 'employee', and 'salarygrade'. The 'employee' table is selected, and its columns are listed: 'Employee_No' (int PK), 'Employee_Name' (varchar(10)), 'Job' (varchar(9)), 'MGR' (int), 'HireDate' (date), 'Salary' (double(7,2)), 'Commission' (double(7,2)), and 'Department_No' (int). The bottom panel shows the 'Result Grid' with the following data:

Job
ANALYST
CLERK
SALESMAN
MANAGER
PRESIDENT

The status bar at the bottom indicates 'Query Completed' and the system time is 12:00 AM on 1/14/2022.

Database Technologies Assignment - 01

Rollno: 210950320034, Name: Deepankar jadhav

Q7) List the details of the employees in departments 10 and 20 in alphabetical order of employee names.

```
SELECT * FROM emp.employee where Department_No between 10 and 20  
order by Employee_Name;
```

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL query:

```
1 • irtment_No between 10 and 20 order by Employee_Name;
```

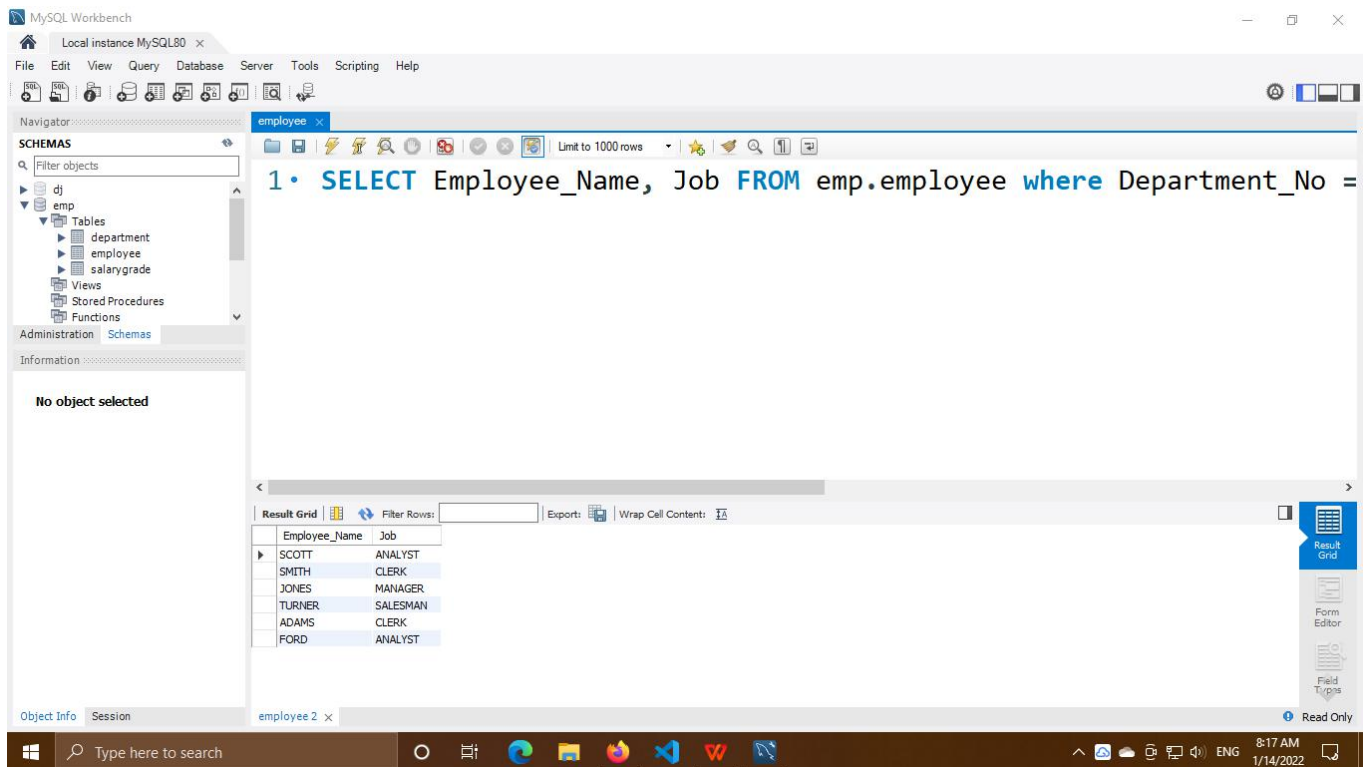
The results are displayed in the Result Grid, showing a list of employees in departments 10 and 20, ordered by their names. The data is as follows:

Employee_No	Employee_Name	Job	MGR	HireDate	Salary	Commission	Department_No
7879	ADAMS	CLERK	7788	1981-05-23	1100.00	NULL	20
7782	CLARK	MANAGER	7839	1981-06-09	2450.00	NULL	10
7902	FORD	ANALYST	7566	1981-12-03	3000.00	NULL	20
7566	JONES	MANAGER	7839	1981-02-04	2975.00	NULL	20
7839	KING	PRESIDENT	NULL	1981-11-17	5000.00	NULL	10
7934	MILLER	CLERK	7782	1981-01-23	1300.00	NULL	10
2788	SCOTT	ANALYST	7566	1981-04-19	3000.00	NULL	20
7369	SMITH	CLERK	7902	1980-12-17	800.00	NULL	20
7644	TURNER	SALESMAN	7698	1981-09-08	1500.00	NULL	20
7698	WARD	SALESMAN	7566	1981-01-12	1250.00	NULL	20

Database Technologies Assignment - 01
Rollno: 210950320034, Name: Deepankar jadhav

Q8) List names and jobs of all Employees in department 20

SELECT Employee_Name, Job FROM emp.employee where Department_No = 20;



The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL query:

```
1 • SELECT Employee_Name, Job FROM emp.employee where Department_No =
```

The left sidebar shows the 'SCHEMAS' panel with a tree view of the database structure. The 'emp' schema is selected, showing tables: department, employee, and salarygrade. The 'employee' table is highlighted.

The bottom panel displays the 'Result Grid' with the following data:

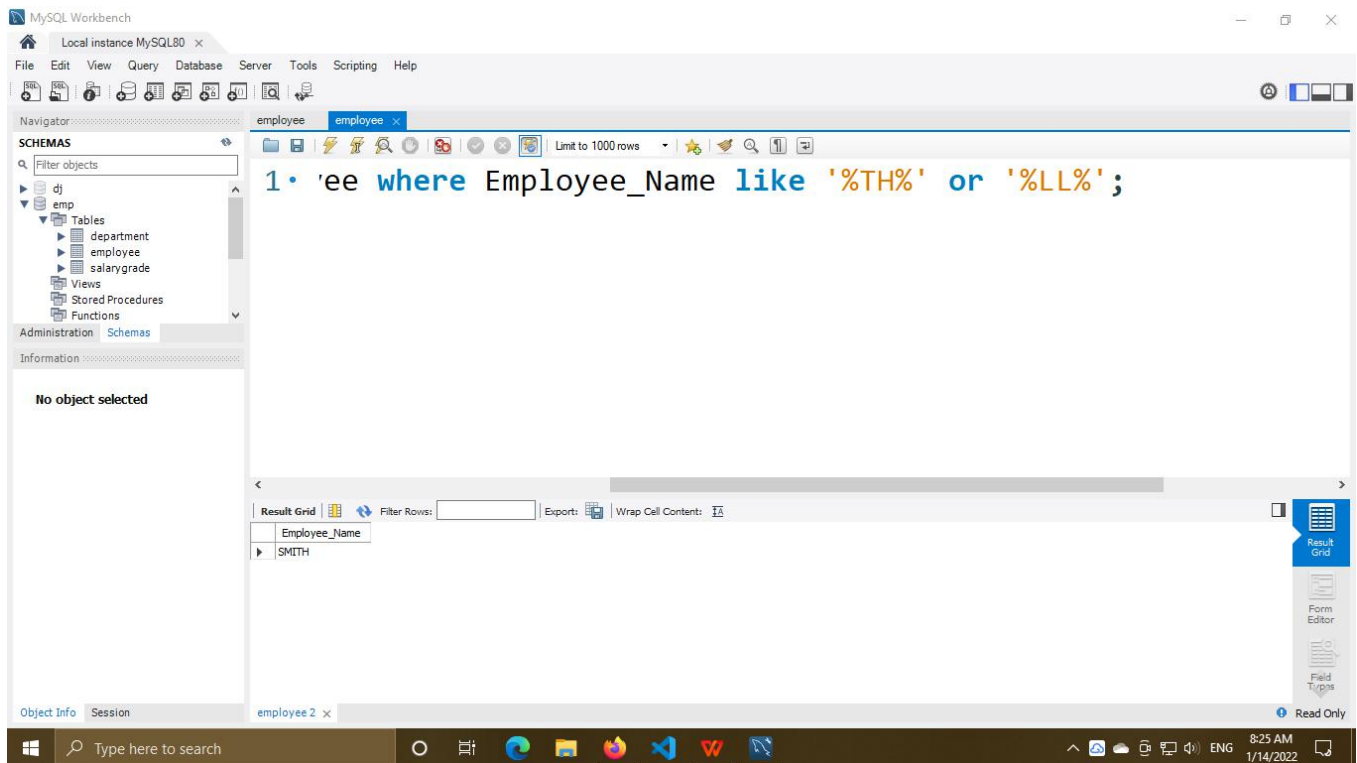
Employee_Name	Job
SCOTT	ANALYST
SMITH	CLERK
JONES	MANAGER
TURNER	SALESMAN
ADAMS	CLERK
FORD	ANALYST

The status bar at the bottom indicates 'Read Only' and shows the system time as 8:17 AM on 1/14/2022.

Database Technologies Assignment - 01
Rollno: 210950320034, Name: Deepankar jadhav

Q9) Display all employee names which have TH or LL in them

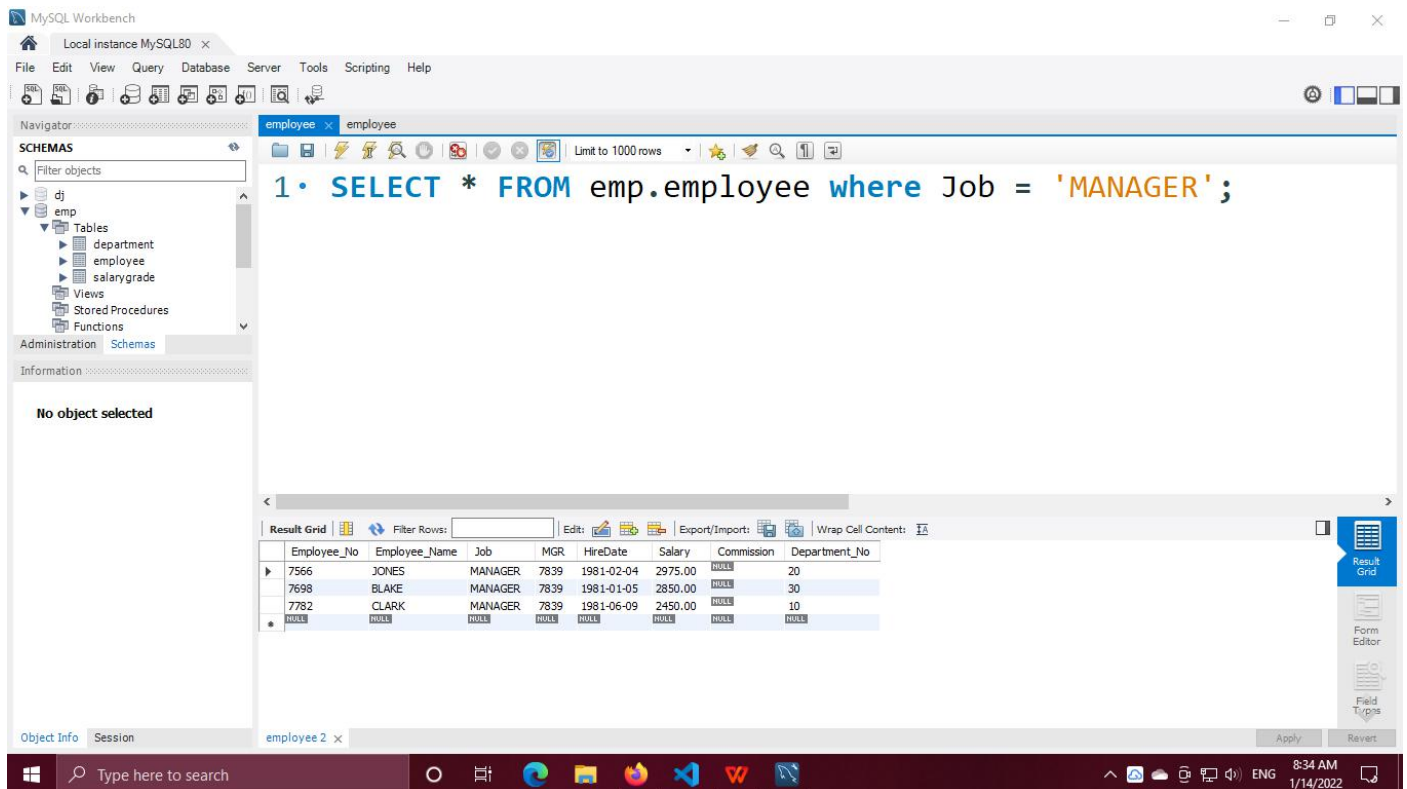
SELECT Employee_Name FROM emp.employee where Employee_Name like '%TH%' or '%LL%';



Database Technologies Assignment - 01
Rollno: 210950320034, Name: Deepankar jadhav

Q10) List the details of the employees who have a manager

```
SELECT * FROM emp.employee where Job = 'MANAGER';
```



Database Technologies Assignment - 01

Rollno: 210950320034, Name: Deepankar jadhav

Q11 Display the name and the total remuneration for all employees

SELECT Employee_Name, (Salary*12) FROM emp.employee;

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL query:

```
1 • SELECT Employee_Name, (Salary*12) FROM emp.employee;
2
```

The query has been executed, and the results are displayed in the Result Grid. The results show the Employee_Name and the calculated total remuneration (Salary*12) for all employees in the emp.employee table.

Employee_Name	(Salary*12)
SCOTT	36000.00
SMITH	9600.00
ALLEN	12000.00
WARD	15000.00
JONES	35700.00
TURNER	18000.00
MARTINE	15000.00
BLAKE	34200.00
CLARK	29400.00
KING	60000.00
ADAMS	13200.00
JAMES	11400.00
FORD	36000.00
MILLER	15600.00

Database Technologies Assignment - 01
Rollno: 210950320034, Name: Deepankar jadhav

Q12) Display name, annual salary and commission of all sales people whose monthly salary is greater than their commission. The output should be ordered by salary highest first. If two or more employees have the same salary sort by employee name, within the highest salary order.

SELECT Employee_Name,(Salary*12),Commission FROM emp.employee where (Salary > Commission) order by Salary DESC;

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL query:

```
1 SELECT Employee_Name,(Salary*12),Commission FROM emp.employee where (Salary > Commission) order by Salary DESC;
```

The left sidebar shows the 'SCHEMAS' panel with the 'emp' database selected. The 'Table: employee' is highlighted, and its columns are listed:

- Employee_No: int PK
- Employee_Name: varchar(10)
- Job: varchar(9)
- MGR: int
- HireDate: date
- Salary: double(7,2)
- Commission: double(7,2)
- Department_No: int

The 'Result Grid' shows the output of the query:

Employee_Name	(Salary*12)	Commission
WARK	15000.00	500.00
ALLEN	12000.00	300.00

The bottom status bar indicates 'Query Completed' and 'Read Only'.

Database Technologies Assignment - 01

Rollno: 210950320034, Name: Deepankar jadhav

Q13) Display all employees who were hired during 1982.

```
SELECT * FROM emp.employee where HireDate between '1982-01-01' and '1982-12-31';
```

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL query:

```
1 • >.employee where HireDate between '1982-01-01' and '1982-12-31';
```

The left sidebar shows the SCHEMAS pane with a tree view of the database structure. The 'employee' table is selected. The 'Table: employee' section shows the following columns and data types:

- Employee_No: int PK
- Employee_Name: varchar(10)
- Job: varchar(9)
- MGR: int
- HireDate: date
- Salary: double(7,2)
- Commission: double(7,2)
- Department_No: int

The bottom pane shows the 'Result Grid' with the following data:

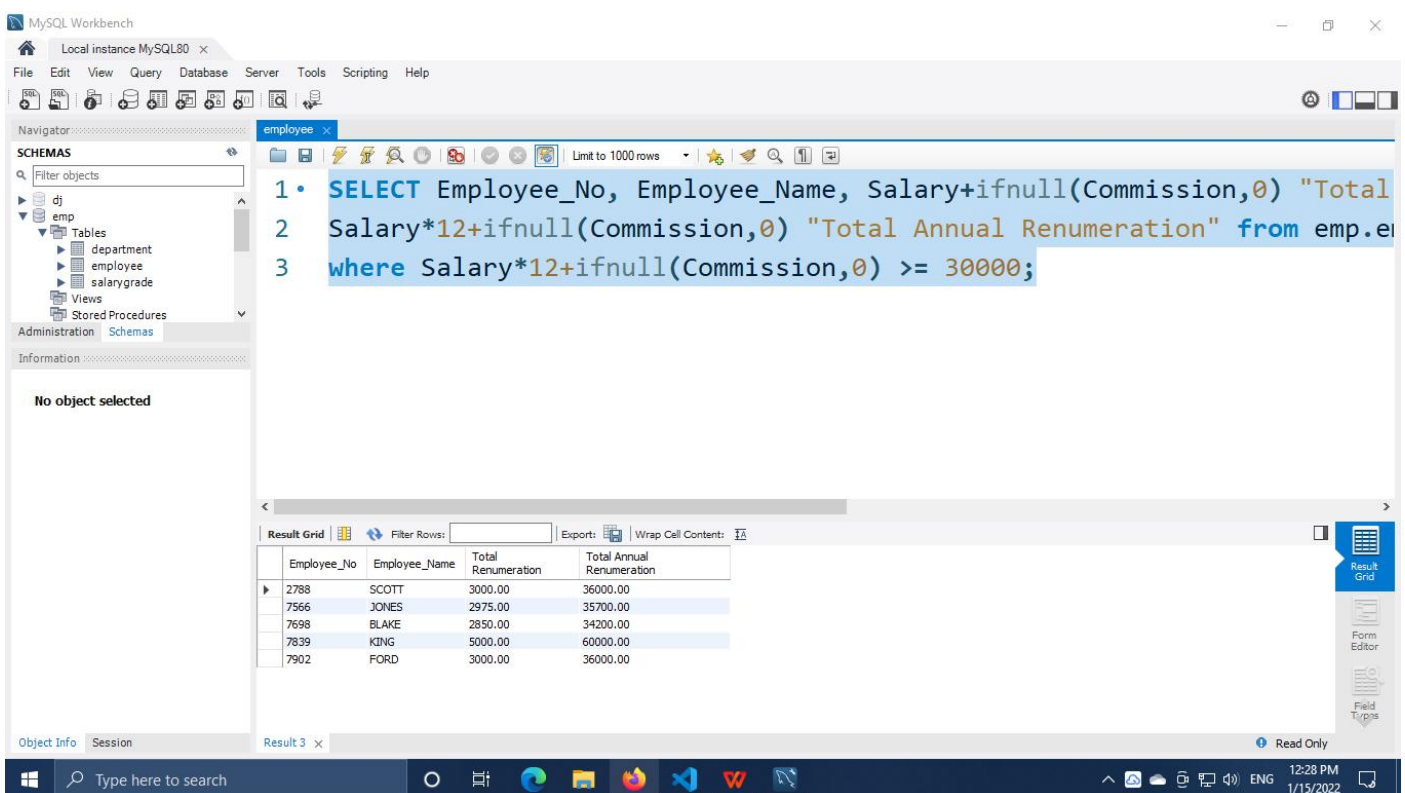
Employee_No	Employee_Name	Job	MGR	HireDate	Salary	Commission	Department_No
7782	CLARK	MANAGER	7839	1982-06-09	2450.00	NULL	10
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

The status bar at the bottom indicates 'Ready' and the system clock shows '2:48 PM 1/14/2022'.

Database Technologies Assignment - 01
Rollno: 210950320034, Name: Deepankar jadhav

Q15) Define a variable representing the expression used to calculate an employee's total annual remuneration. Use this variable in a statement, which finds all employees who earn 30,000 a year or more.

```
SELECT Employee_No, Employee_Name, Salary+ifnull(Commission,0) "Total  
Remuneration",  
Salary*12+ifnull(Commission,0) "Total Annual Remuneration" from  
emp.employee  
where Salary*12+ifnull(Commission,0) >= 30000;
```



The screenshot shows the MySQL Workbench interface. The SQL editor contains the following query:

```
1 • SELECT Employee_No, Employee_Name, Salary+ifnull(Commission,0) "Total  
2 Salary*12+ifnull(Commission,0) "Total Annual Remuneration" from emp.e  
3 where Salary*12+ifnull(Commission,0) >= 30000;
```

The Results window displays the following data:

Employee_No	Employee_Name	Total Remuneration	Total Annual Remuneration
2788	SCOTT	3000.00	36000.00
7566	JONES	2975.00	35700.00
7698	BLAKE	2850.00	34200.00
7839	KING	5000.00	60000.00
7902	FORD	3000.00	36000.00

Database Technologies Assignment - 01

Rollno: 210950320034, Name: Deepankar jadhav

Q16) List the employee names and their salaries increased by 15% and expressed as a whole number .

```
SELECT Employee_Name,Salary, floor(Salary+Salary*0.15) "Incremented Salary by 15%"  
FROM emp.employee;
```

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL query:

```
1 • SELECT Employee_Name,Salary, floor(Salary+Salary*0.15) "Incremented Salary by 15%"  
2 FROM emp.employee;
```

The result grid displays the following data:

Employee_Name	Salary	Incremented Salary by 15%
SCOTT	3000.00	3450
SMITH	800.00	920
ALLEN	1000.00	1150
WARD	1250.00	1437
JONES	2975.00	3421
TURNER	1500.00	1725
MARTINE	1250.00	1437
BLAKE	2850.00	3277
CLARK	2450.00	2817

Database Technologies Assignment - 01

Rollno: 210950320034, Name: Deepankar jadhav

Q17) Display the employee name and job by concatenating them and give an appropriate heading.

```
SELECT concat(Job," ",Employee_Name) "Employee Intro" FROM emp.employee;
```

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL query:

```
1. SELECT concat(Job," ",Employee_Name) "Employee Intro" FROM
```

The left sidebar shows the 'SCHEMAS' panel with a tree view of the database structure. The 'emp' schema is selected, showing tables: department, employee, salarygrade, and views. The 'Information' panel shows 'No object selected'.

The bottom panel displays the 'Result Grid' with the following data:

Employee Intro
ANALYST SCOTT
CLERK SMITH
SALESMAN ALLEN
SALESMAN WARK
MANAGER JONES
SALESMAN TURNER
SALESMAN MARTINE
MANAGER BLAKE
MANAGER CLARK
PRESIDENT KING
CLERK ADAMS
CLERK JAMES
ANALYST FORD
CLERK MILLER

The status bar at the bottom indicates 'Result 10' and 'Read Only'.

Database Technologies Assignment - 01
Rollno: 210950320034, Name: Deepankar jadhav

Q18) Display the employee name and the job in brackets.

```
SELECT concat("(",Employee_Name,")") "Employee_Name",concat("(",Job,")")  
"Job" FROM emp.employee;
```

The screenshot shows the MySQL Workbench interface. The query editor contains the following SQL query:

```
1 • ame,")") "Employee_Name",concat("(",Job,")") "Job" FROM emp.employee;
```

The result grid displays the output of the query, showing the employee name and job in brackets. The data is as follows:

Employee_Name	Job
(SCOTT)	(ANALYST)
(SMITH)	(CLERK)
(ALLEN)	(SALESMAN)
(WARD)	(SALESMAN)
(JONES)	(MANAGER)
(TURNER)	(SALESMAN)
(MARTINE)	(SALESMAN)
(BLAKE)	(MANAGER)
(CLARK)	(MANAGER)
(KING)	(PRESIDENT)
(ADAMS)	(CLERK)
(JAMES)	(CLERK)
(FORD)	(ANALYST)
(MILLER)	(CLERK)

Database Technologies Assignment - 02

Rollno: 210950320034, Name: Deepankar jadhav

Q19) Do a case insensitive search for a list of employees with a job that the user enters.

ALTER TABLE emp.employee

ADD FULLTEXT(Job);

SELECT * FROM employee WHERE MATCH (Job) AGAINST ('CLERK');

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'emp' selected. The main editor window contains the following SQL script:

```
1 • ALTER TABLE emp.employee
2   ADD FULLTEXT(Job);
3 • SELECT * FROM employee WHERE MATCH (Job) AGAINST ('CLERK');
4
5
```

Below the script, the 'Result Grid' shows the output of the query. It contains a table with 8 columns: Employee_No, Employee_Name, Job, MGR, HireDate, Salary, Commission, and Department_No. The results are as follows:

Employee_No	Employee_Name	Job	MGR	HireDate	Salary	Commission	Department_No
7369	SMITH	CLERK	7902	1980-12-17	800.00	NULL	20
7879	ADAMS	CLERK	7788	1987-05-23	1100.00	NULL	20
7934	MILLER	CLERK	7782	1981-01-23	1300.00	NULL	10
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

The bottom status bar shows the session information: 'employee 2 x' and 'Apply Revert' buttons. The Windows taskbar at the bottom indicates the time is 7:53 AM on 1/16/2022.

Database Technologies Assignment - 01
Rollno: 210950320034, Name: Deepankar jadhav

Q20) It has been discovered that the sales people in department 30 are not all male. Hence display the job of salesman as salesperson.

```
use emp;
alter table employee modify Job varchar(15);
update employee set Job = "SALESPERSON" where Department_No = 30;
select * from emp.employee;
```

The screenshot shows the MySQL Workbench interface. The top menu bar includes File, Edit, View, Query, Database, Server, Tools, Scripting, and Help. The left sidebar shows the 'SCHEMAS' tab with a tree view containing 'dj', 'emp', 'Tables', 'Views', 'Administration', and 'Schemas'. The 'emp' schema is selected, and the 'employee' table is highlighted. The main editor displays four SQL queries:

1. `use emp;`
2. `alter table employee modify Job varchar(15);`
3. `update employee set Job = "SALESPERSON" where Department_No = 30;`
4. `select * from emp.employee;`

The bottom pane shows the 'Result Grid' with the following data:

Employee_No	Employee_Name	Job	MGR	HireDate	Salary	Commission	Department_No
7782	CLARK	MANAGER	7839	1982-06-09	2450.00	NULL	10
7839	KING	PRESIDENT	NULL	1981-11-17	5000.00	NULL	10
7934	MILLER	CLERK	7782	1981-01-23	1300.00	NULL	10
2788	SCOTT	ANALYST	7566	1987-04-19	3000.00	NULL	20
7369	SMITH	CLERK	7902	1980-12-17	800.00	NULL	20
7566	JONES	MANAGER	7839	1981-02-04	2975.00	NULL	20
7644	TURNER	SALESMAN	7698	1981-09-08	1500.00	NULL	20
7879	ADAMS	CLERK	7788	1987-05-23	1100.00	NULL	20
7902	FORD	ANALYST	7566	1981-12-03	3000.00	NULL	20
7499	ALLEN	SALESPERSON	7698	1981-02-20	1000.00	300.00	30
7521	WARD	SALESPERSON	7698	1981-02-22	1250.00	500.00	30
7654	MARTINE	SALESPERSON	7698	1981-09-28	1250.00	1400.00	30
7698	BLAKE	SALESPERSON	7839	1981-01-05	2850.00	NULL	30
7900	JAMES	SALESPERSON	7698	1981-12-03	950.00	NULL	30
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

The bottom status bar shows 'Object Info', 'Session', 'employee 2', 'Apply', and 'Revert' buttons. The system tray at the bottom indicates the time is 4:20 PM on 1/15/2022.