

Ramanujan College

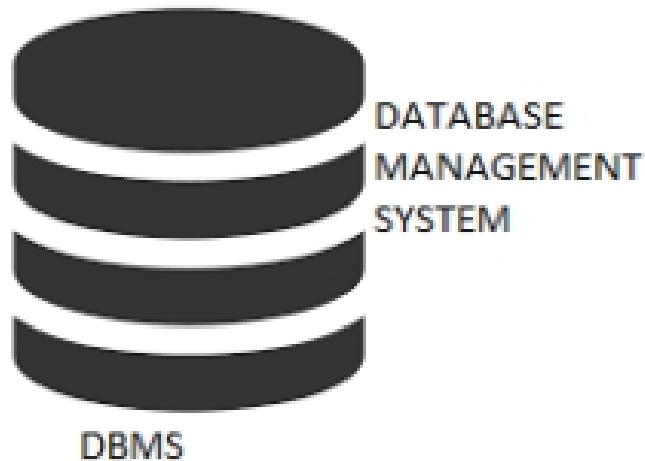
Delhi University

Practical File

Database

Management

System(Core)



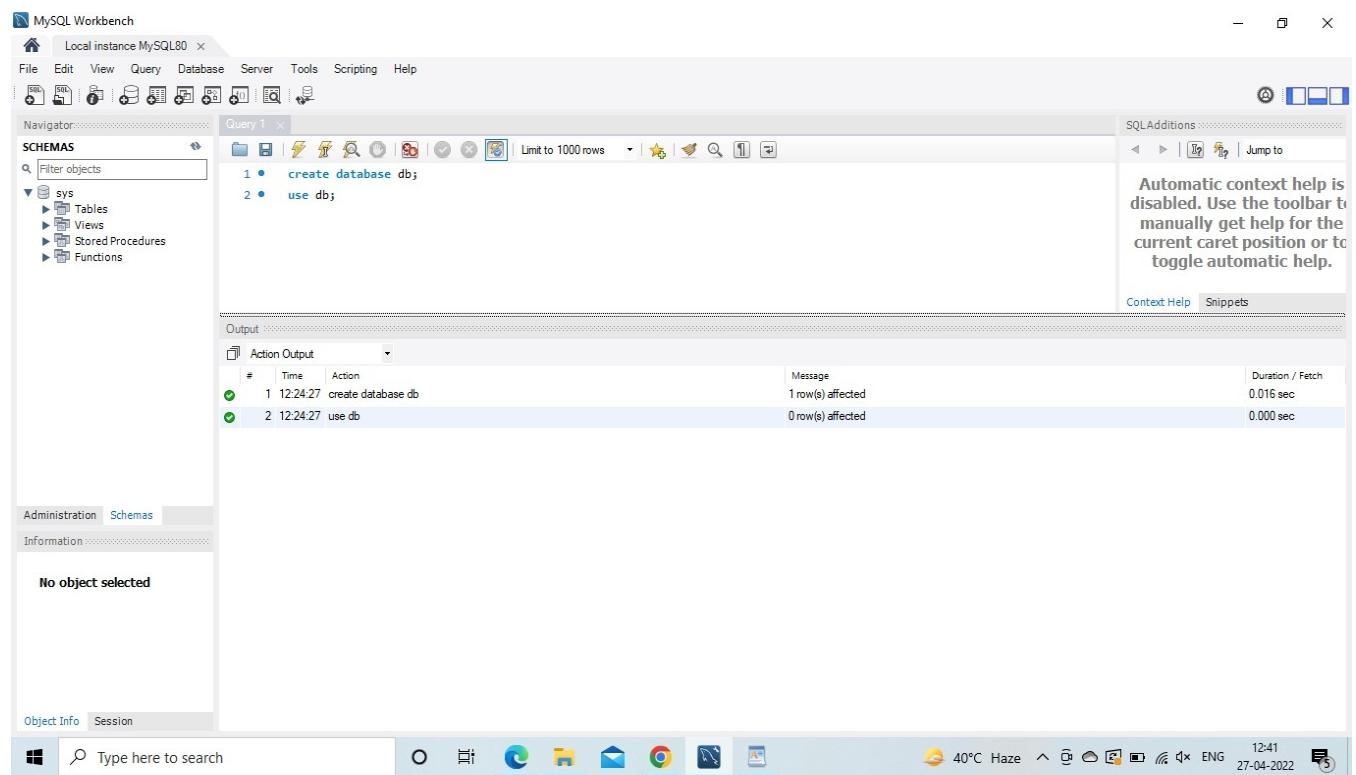
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Create two schemas **Employee** and **Department** given in the guidelines. Insert at least 10 records in each of the schemas.

Submit the screenshots of successfully executed queries along with the description of schemas.

CREATING AND USING THE DATABASE:



CREATING DEPARTMENT AND DESCRIPTION OF DEPARTMENT SCHEMA :

The screenshot shows the MySQL Workbench interface. In the Navigator pane, under the 'db' schema, a 'Tables' folder contains a single entry named 'department'. The 'Query 1' editor contains the following SQL code:

```
1 • create database db;
2 • use db;
3 • create table department(dno int(11) not null,dname varchar(50) default null,location varchar(50) default null,primary key(dno)) engine=innodb;
```

The 'Output' pane shows the execution results:

#	Time	Action	Message	Duration / Fetch
1	12:24:27	create database db	1 row(s) affected	0.016 sec
2	12:24:27	use db	0 row(s) affected	0.000 sec
3	12:47:59	create database db	Error Code: 1007. Can't create database 'db'; database exists	0.015 sec
4	12:48:14	create table department(dno int(11) not null,dname varchar(50) default null,location varchar(50) default null,primary key(dno)) engine=innodb;	0 row(s) affected, 1 warning(s): 1681 Integer display width is deprecated and will be removed in ...	0.078 sec

The taskbar at the bottom shows the date as 27-04-2022 and the time as 12:48.

The screenshot shows the MySQL Workbench interface. In the Navigator pane, under the 'db' schema, a 'Tables' folder contains a single entry named 'department'. The 'Query 1' editor displays the table structure:

Field	Type	Null	Key	Default	Extra
dno	int	NO	PRI	NULL	
dname	varchar(50)	YES		NULL	
location	varchar(50)	YES		NULL	

The 'Output' pane shows the execution results:

#	Time	Action	Message	Duration / Fetch
1	12:24:27	create database db	1 row(s) affected	0.016 sec
2	12:24:27	use db	0 row(s) affected	0.000 sec
3	12:47:59	create database db	Error Code: 1007. Can't create database 'db'; database exists	0.015 sec
4	12:48:14	create table department(dno int(11) not null,dname varchar(50) default null,location varchar(50) default null,primary key(dno)) engine=innodb;	0 row(s) affected, 1 warning(s): 1681 Integer display width is deprecated and will be removed in ...	0.078 sec
5	12:50:01	describe department	3 row(s) returned	0.016 sec / 0.000 sec
6	12:51:20	describe department	3 row(s) returned	0.000 sec / 0.000 sec

The taskbar at the bottom shows the date as 27-04-2022 and the time as 12:51.

INSERT DATA IN DEPARTMENT TABLE AND DISPLAY DEPARTMENT TABLE:

The screenshot shows the MySQL Workbench interface. In the Query Editor (Query 1), the following SQL code is run:

```

1 • create database db;
2 • use db;
3 • create table department(dno int(11) not null,dname varchar(50) default null,location varchar(50) default null,primary key(dno));
4 • describe department;
5 • insert into department values(1,'Accounting','New Delhi'),(2,'Research','Gurgaon'),(3,'Sales','Kolkata'),(4,'Operation','Bangalore'),(5,'Marketing','Noida'),(6,'Administrative','Jaipur'),(7,'Computer Science','Aligarh'),(8,'Art&Culture','Faridabad'),(9,'Literature','Ahmedabad'),(12,'Information Technology','Chennai');

```

The Output pane shows the results of the actions:

#	Time	Action	Message	Duration / Fetch
1	12:24:27	create database db	1 row(s) affected	0.016 sec
2	12:24:27	use db	0 row(s) affected	0.000 sec
3	12:47:59	create database db	Error Code: 1007. Can't create database 'db'; database exists	0.015 sec
4	12:48:14	create table department(dno int(11) not null,dname varchar(50) default null,location varchar(50) def...	0 row(s) affected, 1 warning(s): 1681 Integer display width is deprecated and will be removed in a f...	0.078 sec
5	12:50:01	describe department	3 row(s) returned	0.016 sec / 0.000 sec
6	12:51:20	describe department	3 row(s) returned	0.000 sec / 0.000 sec
7	12:58:10	insert into department values(1,'Accounting','New Delhi'),(2,'Research','Gurgaon'),(3,'Sales','Kolkata'),(4,'Operation','Bangalore'),(5,'Marketing','Noida'),(6,'Administrative','Jaipur'),(7,'Computer Science','Aligarh'),(8,'Art&Culture','Faridabad'),(9,'Literature','Ahmedabad'),(12,'Information Technology','Chennai');	10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0	0.016 sec

The screenshot shows the MySQL Workbench interface. In the Query Editor (Query 1), the following SQL code is run:

```

4 • describe department;
5 • insert into department values(1,'Accounting','New Delhi'),(2,'Research','Gurgaon'),(3,'Sales','Kolkata'),(4,'Operation','Bangalore'),(5,'Marketing','Noida'),(6,'Administrative','Jaipur'),(7,'Computer Science','Aligarh'),(8,'Art&Culture','Faridabad'),(9,'Literature','Ahmedabad'),(12,'Information Technology','Chennai');
9 • select * from department;

```

The Result Grid pane displays the data from the department table:

dno	dname	location
1	Accounting	New Delhi
2	Research	Gurgaon
3	Sales	Kolkata
4	Operation	Bangalore
5	Marketing	Noida
6	Administrative	Jaipur
7	Computer Science	Aligarh
8	Art&Culture	Faridabad
9	Literature	Ahmedabad
12	Information Technology	Chennai

The Action Output pane shows the results of the actions:

#	Time	Action	Message	Duration / Fetch
1	12:24:27	create database db	1 row(s) affected	0.016 sec
2	12:24:27	use db	0 row(s) affected	0.000 sec
3	12:47:59	create database db	Error Code: 1007. Can't create database 'db'; database exists	0.015 sec

CREATING EMPLOYEE SCHEMA AND DESCRIPTION OF EMPLOYEE SCHEMA :

The screenshot shows the MySQL Workbench interface. In the Navigator pane, under the 'db' schema, the 'Tables' folder is expanded, showing 'department'. In the central Query Editor window, the following SQL code is displayed:

```
1 • create database db;
2 • use db;
3 • create table department(dno int(11) not null,dname varchar(50) default null,location varchar(50) default null,primary key(dno));
4 • describe department;
5 • insert into department values(1,'Accounting','New Delhi'),(2,'Research','Gurgaon'),(3,'Sales','Kolkata'),(4,'Operation','Bangalore'),(5,'Marketing','Noida'),(6,'Administrative','Jaipur'),(7,'Computer Science','Aligarh'),(8,'Art&Culture','Faridabad'),(9,'Literature','Ahmedabad'),(12,'Information Technology','Chennai');
6 • select * from department;
7 •
8 •
9 •
10 • create table employee(eno char(3) not null,ename varchar(50) not null,job_type varchar(50) not null,manager char(3) default null);
```

The right-hand panel contains a 'SQL Additions' section with a note: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

The screenshot shows the MySQL Workbench interface. In the Navigator pane, under the 'db' schema, the 'Tables' folder is expanded, showing 'employee'. In the central Result Grid window, the schema for the 'employee' table is displayed:

Field	Type	Null	Key	Default	Extra
eno	char(3)	NO	PRI	NULL	
ename	varchar(50)	NO		NULL	
job_type	varchar(50)	NO		NULL	
manager	char(3)	YES		NULL	
hire_date	date	NO		NULL	
dno	int	YES	MUL	NULL	
commission	decimal(10,2)	YES		NULL	
salary	decimal(7,2)	NO		NULL	

In the bottom Output window, the results of the 'describe employee' command are shown:

#	Time	Action	Message	Duration / Fetch
8	12:59:56	select * from department LIMIT 0, 1000	10 row(s) returned	0.000 sec / 0.000 sec
9	13:05:51	create table employee(eno char(3) not null,ename varchar(50) not null,job_type varchar(50) not n... 0 row(s) affected, 1 warning(s): 1631 Integer display width is deprecated and will be removed in a ... 0.046 sec		
10	13:07:06	describe employee	8 row(s) returned	0.016 sec / 0.000 sec

INSERT DATA IN EMPLOYEE TABLE :

The screenshot shows the MySQL Workbench interface. In the Navigator pane, under the 'db' schema, the 'Tables' folder contains 'employee'. The 'Query 1' editor displays the following SQL code:

```
7 (7,'Computer Science','Aligarh'),(8,'Art&Culture','Faridabad'),(9,'literature','Ahmedabad'),
8 (12,'information technology','chennai');
9 • select * from department;
10 • create table employee(eno char(3) not null,ename varchar(50) not null,job_type varchar(50) not null,manager char(3) default
11 • describe employee;
12 • insert into employee values('20','komal','clerk','130','1981-12-17',2,0.00,1000.00),
13 ('30','riya','sales-man','70','1981-02-20',3,300.00,2000.00),
14 ('40','bhawika','sales-man','70','1981-02-22',3,500.00,1300.00),
15 ('50','vasundhara','manager','90','1981-04-02',2,0.00,2300.00),
16 ('60','priyanshu','sales-man','100','1981-04-22',3,1400.00,1250.00),
17 ('70','Dipanshu','manager','90','1981-05-01',3,0.00,2870.00),
18 ('80','Atul','manager','90','1981-06-09',1,0.00,2900.00),
19 ('90','Shambhav','president',NULL,'1981-11-17',1,0.00,2950.00),
20 ('100','vinohd','sales-man','70','1981-09-08',3,0.00,1450.00),
21 ('110','Arnab','clerk','80','1983-01-12',2,0.00,1150.00),
22 ('120','niharika','analyst','50','1982-12-09',2,0.00,2850.00),
23 ('130','rashika','clerk','70','1981-12-03',3,0.00,950.00),
24 ('140','madhav','analyst','50','1982-12-09',2,0.00,2600.00),
25 ('150','vishnu','clerk','120','1982-01-23',4,0.00,1300.00);
```

The 'Output' pane shows the results of the actions:

#	Time	Action	Message	Duration / Fetch
9	13:05:51	create table employee(eno char(3) not null,ename varchar(50) not null,job_type varchar(50) not null,manager char(3) default	0 row(s) affected. 1 warning(s): 1681 Integer display width is deprecated and will be removed in a ...	0.046 sec
10	13:07:06	describe employee	8 row(s) returned	0.016 sec / 0.000 sec
11	13:27:43	insert into employee values('20','komal','clerk','130','1981-12-17',2,0.00,1000.00),('30','riya','sales-man','70','1981-02-20',3,300.00,2000.00),('40','bhawika','sales-man','70','1981-02-22',3,500.00,1300.00),('50','vasundhara','manager','90','1981-04-02',2,0.00,2300.00),('60','priyanshu','sales-man','100','1981-04-22',3,1400.00,1250.00),('70','Dipanshu','manager','90','1981-05-01',3,0.00,2870.00),('80','Atul','manager','90','1981-06-09',1,0.00,2900.00),('90','Shambhav','president',NULL,'1981-11-17',1,0.00,2950.00),('100','vinohd','sales-man','70','1981-09-08',3,0.00,1450.00),('110','Arnab','clerk','80','1983-01-12',2,0.00,1150.00),('120','niharika','analyst','50','1982-12-09',2,0.00,2850.00),('130','rashika','clerk','70','1981-12-03',3,0.00,950.00),('140','madhav','analyst','50','1982-12-09',2,0.00,2600.00),('150','vishnu','clerk','120','1982-01-23',4,0.00,1300.00);	14 row(s) affected Records: 14 Duplicates: 0 Warnings: 0	0.016 sec

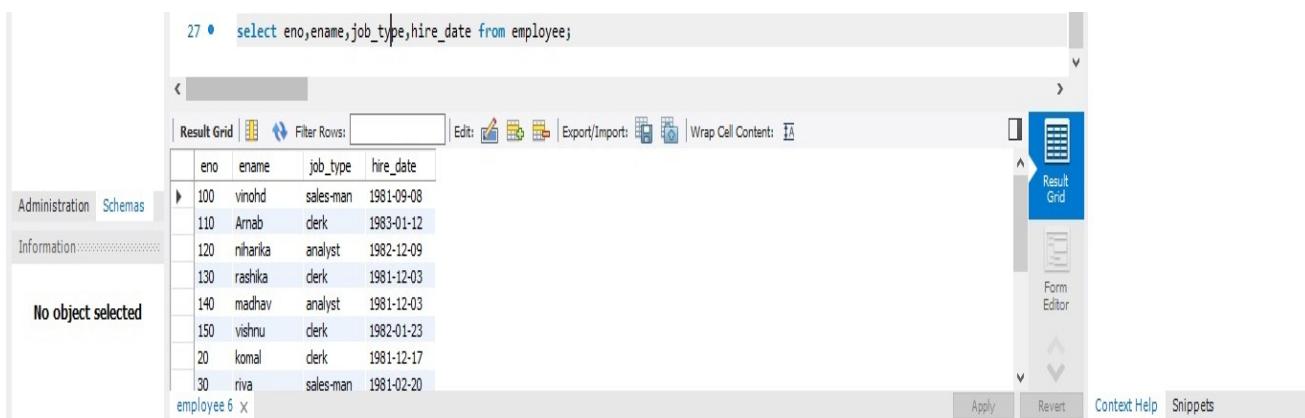
EMPLOYEE TABLE :

The screenshot shows the MySQL Workbench interface. In the Navigator pane, under the 'db' schema, the 'Tables' folder contains 'employee'. The 'Result Grid' editor displays the data from the 'employee' table:

eno	ename	job_type	manager	hire_date	dno	commission	salary
100	vinohd	sales-man	70	1981-09-08	3	0.00	1450.00
110	Arnab	clerk	80	1983-01-12	2	0.00	1150.00
120	niharika	analyst	50	1982-12-09	2	0.00	2850.00
130	rashika	clerk	70	1981-12-03	3	0.00	950.00
140	madhav	analyst	50	1981-12-03	2	0.00	2600.00
150	vishnu	clerk	120	1982-01-23	4	0.00	1300.00
20	komal	clerk	130	1981-12-17	2	0.00	1000.00
30	riya	sales-man	70	1981-02-20	3	300.00	2000.00
40	bhawika	sales-man	70	1981-02-22	3	500.00	1300.00
50	vasundhara	manager	90	1981-04-02	2	0.00	2300.00
60	priyanshu	sales-man	100	1981-04-22	3	1400.00	1250.00
70	Dipanshu	manager	90	1981-05-01	3	0.00	2870.00
80	Atul	manager	90	1981-06-09	1	0.00	2900.00
90	Shambhav	president	NULL	1981-11-17	1	0.00	2950.00
*							

Queries

1) Query to display Employee Name, Job, Hire Date, Employee Number; for each employee with the Employee Number appearing first.



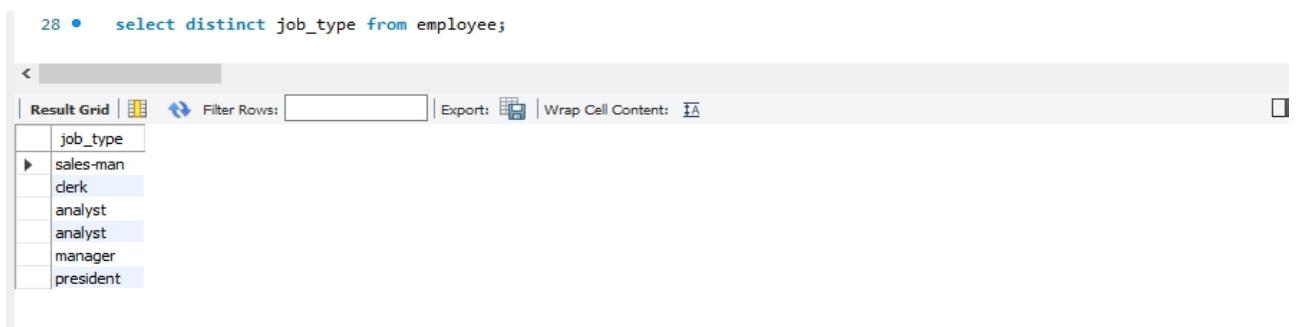
The screenshot shows the Oracle SQL Developer interface. The code editor at the top contains the following SQL query:

```
27 • select eno,ename,job_type,hire_date from employee;
```

The results are displayed in a grid below:

eno	ename	job_type	hire_date
100	vinohd	sales-man	1981-09-08
110	Arbab	clerk	1983-01-12
120	niharika	analyst	1982-12-09
130	rashika	clerk	1981-12-03
140	madhav	analyst	1981-12-03
150	vishnu	clerk	1982-01-23
20	komal	clerk	1981-12-17
30	riva	sales-man	1981-02-20

2) Query to display unique Jobs from the Employee Table



The screenshot shows the Oracle SQL Developer interface. The code editor at the top contains the following SQL query:

```
28 • select distinct job_type from employee;
```

The results are displayed in a grid below:

job_type
sales-man
clerk
analyst
analyst
manager
president

3) Query to display the Employee Name concatenated by a Job separated by a comma.

The screenshot shows a database interface with a sidebar containing navigation links like 'Stored Procedures', 'Functions', 'sys' (Tables, Views, Stored Procedures, Functions), 'Administration', 'Schemas', 'Information', and 'No object selected'. The main area displays a query window with the following content:

```
29 • select concat(ename, ',', job_type) as Name_Job from employee;
```

The results are shown in a 'Result Grid' tab:

Name_Job
vinohd,sales-man
Arnab,clerk
niharika,analyst
rashika,clerk
madhav,analyst
vishnu,clerk
komal,clerk
riya,sales-man
bhawika,sales-man
vasundhara,manager
priyanshu,sales-man
Dipanshu,manager
Atul,manager
Shambhv,president

A vertical toolbar on the right side includes icons for 'Result Grid' (which is selected), 'Form Editor', 'Field Types', and 'Query Stats'.

4) Query to display all the data from the Employee Table. Separate each Column by a comma and name the said column as THE_OUTPUT.

The screenshot shows a database interface with a sidebar containing navigation links like 'Functions', 'Administration', 'Schemas', 'Information', and 'No object selected'. The main area displays a query window with the following content:

```
30 • select concat(eno, ',', ename, ',', job_type, ',', manager, ',', hire_date, ',', dno, ',', commission, ',', salary) as The_output from emp v
```

The results are shown in a 'Result Grid' tab:

The_output
100,vinohd,sales-man,70,1981-09-08,3,0.00,1...
110,Arnab,clerk,80,1983-01-12,2,0.00,1150.00
120,niharika,analyst,50,1982-12-09,2,0.00,28...
130,rashika,clerk,70,1981-12-03,3,0.00,950.00
140,madhav,analyst,50,1981-12-03,2,0.00,26...
150,vishnu,clerk,120,1982-01-23,4,0.00,1300.00
20,komal,clerk,130,1981-12-17,2,0.00,1000.00
30,riya,sales-man,70,1981-02-20,3,300.00,20...
40,bhawika,sales-man,70,1981-02-22,3,500.0...
50,vasundhara,manager,90,1981-04-02,2,0.0...
60,priyanshu,sales-man,100,1981-04-22,3,140...
70,Dipanshu,manager,90,1981-05-01,3,0.00,2...
80,Atul,manager,90,1981-06-09,1,0.00,2900.00

A vertical toolbar on the right side includes icons for 'Result Grid' (selected), 'Form Editor', 'Field Types', and 'Query Stats'. At the bottom of the interface, there are buttons for 'Result Only', 'Context Help', and 'Snippets'.

5) Query to display the Employee Name and Salary of all the employees earning more than Rs. 2000.



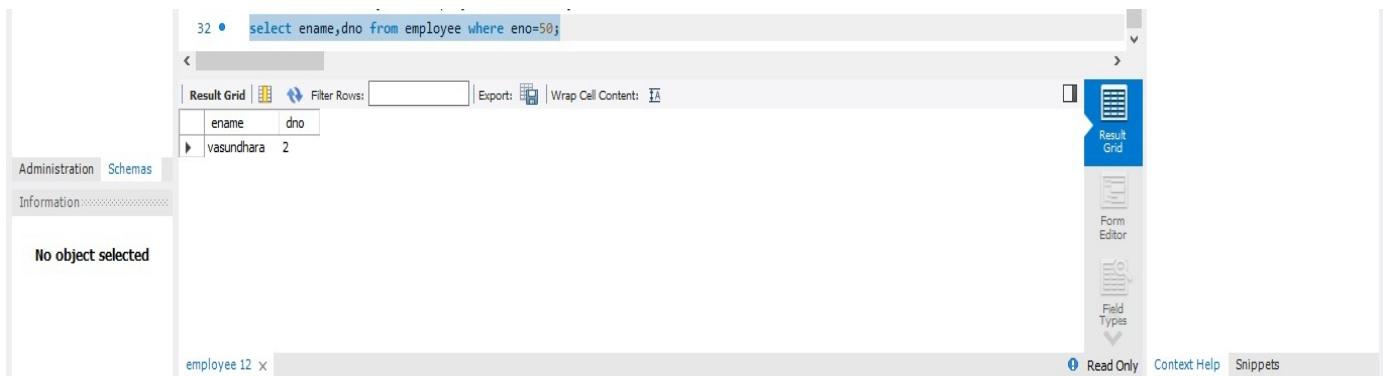
The screenshot shows the Oracle SQL Developer interface with a query window containing the following code:

```
31 • select ename,salary from employee where salary>2000;
```

The result grid displays the following data:

ename	salary
niharika	2850.00
madhav	2600.00
vasundhara	2300.00
Dipanshu	2870.00
Atul	2900.00
Shambhav	2950.00

6) Query to display Employee Name and Department Number for the Employee No= 50.



The screenshot shows the Oracle SQL Developer interface with a query window containing the following code:

```
32 • select ename,dno from employee where eno=50;
```

The result grid displays the following data:

ename	dno
vasundhara	2

7) Query to display Employee Name and Salary for all employees whose salary is not in the range of Rs.10000 and Rs.20000.

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

```
33 • select ename,salary from employee where salary<1000 or salary>2000;
```

The result grid displays the following data:

ename	salary
vinohd	1450.00
Arnab	1150.00
niharika	2850.00
rashika	950.00
madhav	2600.00
vishnu	1300.00
komal	1000.00
riya	2000.00
bhawika	1300.00
vasundhara	2300.00
priyanshu	1250.00
Dipanshu	2870.00
Atul	2900.00
Shambhav	2950.00

8) Query to display Employee Name and Department No. of all the employees in Dept 2 and Dept 3 in the alphabetical order by name.

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

```
27 • select eno,ename,job_type,hire_date from employee;
28 • select distinct job_type from employee;
29 • select concat(ename,',',job_type) as Name_Job from employee;
30 • select concat(eno,',',ename,',',job_type,',',manager,',',hire_date,',',dno,',',commission,',',salary) as The_output from emp
31 • select ename,salary from employee where salary>2000;
32 • select ename,dno from employee where eno=50;
33 • select ename,salary from employee where salary<1000 or salary>2000];
34 • select ename,dno from employee where dno=2 or dno=3 order by ename;
35
```

The result grid displays the following data:

ename	dno
Arnab	2
bhawika	3
Dipanshu	3
komal	2
madhav	2
niharika	2
priyanshu	3
rashika	3
riya	3
vasundhara	2
vinohd	3

9) Query to display Name and Hire Date of every Employee who was hired in 1981.

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

```
35 • select ename,hire_date from employee where hire_date like '1981%';
```

The result grid displays the following data:

ename	hire_date
vinohd	1981-09-08
rashika	1981-12-03
madhav	1981-12-03
komal	1981-12-17
riya	1981-02-20
bhawika	1981-02-22
vasundhara	1981-04-02
priyanshu	1981-04-22
Dipanshu	1981-05-01
Atul	1981-06-09
Shambhav	1981-11-17

10) Query to display Name and Job of all employees who don't have a current Manager.

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

```
36 • select ename,job_type from employee where manager is null;
```

The result grid displays the following data:

ename	job_type
Shambhav	president

11) Query to display the Name, Salary and Commission for all the employees who earn commission.

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

```
37 • select ename,salary ,commission from employee where commission>0;
```

The result grid displays the following data:

ename	salary	commission
riya	2000.00	300.00
bhawika	1300.00	500.00
priyanshu	1250.00	1400.00

12) Sort the data in descending order of Salary and Commission.

38 • select salary,commission from employee order by salary desc,commission desc;

Export: Wrap Cell Content:

	salary	commission
▶	2950.00	0.00
	2900.00	0.00
	2870.00	0.00
	2850.00	0.00
	2600.00	0.00
	2300.00	0.00
	2000.00	300.00
	1450.00	0.00
	1300.00	500.00
	1300.00	0.00
	1250.00	1400.00
	1150.00	0.00
	1000.00	0.00
	950.00	0.00

13) Query to display the Name of all the employees where the third letter of their name is 'A'.

39 • select ename from employee where ename like '_a%';

Export: Wrap Cell Content:

	ename
▶	bhawika
	Shambhav

14) Query to display Name of all employees either have two 'A's or have two 'R's in their name and are either in Dept No = 3 or their Manager's Employee No=70.

The screenshot shows the Oracle SQL Developer interface. On the left, there's a navigation pane with 'Administration' and 'Schemas' tabs, and a message 'No object selected'. The main area displays a query window with the following content:

```
40 • select ename from employee where ename like '%a%' or '%e%' and dno=3 or manager =70;
```

Below the query is a 'Result Grid' table with one column 'ename' containing the following data:

ename
vinohd
Arnab
niharika
rashika
madhav
riya
bhawika
vasundhara
Shambhav

On the right side of the interface, there's a vertical toolbar with icons for 'Result Grid', 'Form Editor', 'Field Types', and 'Query Stats'.

15) Query to display Name, Salary and Commission for all employees whose Commission amount is greater than their Salary increased by 5%.

The screenshot shows the Oracle SQL Developer interface. The main area displays a query window with the following content:

```
41 • select ename,salary,commission from employee where commission >(salary*0.05);  
42 |
```

Below the query is a 'Result Grid' table with three columns: 'ename', 'salary', and 'commission'. The data is as follows:

ename	salary	commission
riya	2000.00	300.00
bhawika	1300.00	500.00
priyanshu	1250.00	1400.00

16) Query to display the Current Date.

```
42 • select curdate();
```

Result Grid	
curdate()	2022-04-27

17) Query to display Name, Hire Date and Salary Review Date which is the 1st Monday after six months of employment.

```
44 | interval 6 month)))day) as review_date from employee;
```

ename	hire_date	review_date
vinohd	1981-09-08	1982-03-15
Arnab	1983-01-12	1983-07-18
niharika	1982-12-09	1983-06-13
rashika	1981-12-03	1982-06-07
madhav	1981-12-03	1982-06-07
vishnu	1982-01-23	1982-07-26
komal	1981-12-17	1982-06-21
riya	1981-02-20	1981-08-24
bhawika	1981-02-22	1981-08-24
vasundhara	1981-04-02	1981-10-05
priyanshu	1981-04-22	1981-10-26
Dipanshu	1981-05-01	1981-11-02
Atul	1981-06-09	1981-12-14
Shubham	1981-11-17	1982-05-24

18) Query to display Name and calculate the number of months between today and the date each employee was hired.

The screenshot shows the MySQL Workbench interface. On the left, there's a tree view for Administration, Schemas, and Information. The central area contains a SQL editor with the following query:

```
45 • select ename,12*(year(curdate())-year(hire_date))+(month(curdate())-month(hire_date))as months from employee;
```

Below the query is a Result Grid showing the output:

ename	months
vinohd	487
Arnab	471
niharika	472
rashika	484
madhav	484
vishnu	483
komal	484
riya	494
bhawika	494
vasundhara	492
priyanshu	492
Dipanshu	491
Atul	490
Shambhav	485

The right side of the interface has a sidebar with icons for Result Grid, Form Editor, Field Types, and Query Stats.

19) Query to display the following for each employee earns < Salary> monthly but wants < 3 * Current Salary >. Label the Column as Dream Salary.

```
16 • select concat(ename,'earns',salary,'monthly but wants',3*salary) as dream_salary from employee;
```

The screenshot shows the MySQL Workbench interface. The central area contains a SQL editor with the following query:

```
16 • select concat(ename,'earns',salary,'monthly but wants',3*salary) as dream_salary from employee;
```

Below the query is a Result Grid showing the output:

dream_salary
vinohdearns1450.00monthly but wants4350.00
Arnabearns1150.00monthly but wants3450.00
niharikaearns2850.00monthly but wants8550.00
rashikaearns950.00monthly but wants2850.00
madhavearns2600.00monthly but wants7800.00
vishnuearns1300.00monthly but wants3900.00
komalearns1000.00monthly but wants3000.00
riyaearns2000.00monthly but wants6000.00
bhawikaearns1300.00monthly but wants3900.00
vasundharaearns2300.00monthly but wants69...
priyanshuearns1250.00monthly but wants3750...
Dipanshuearns2870.00monthly but wants8610.00
Atulearns2900.00monthly but wants8700.00
Shambhavearns2950.00monthly but wants8850...

20) Query to display Name with the 1st letter capitalized and all other letter lower case and Length of their name of all the employees whose name starts with 'J', 'A' and 'M'

48 • select concat(upper(substring(ename,1,1)),lower(substring(ename,2,50))) as name,length(ename) from employee where
49 ename like 'J%' or ename like 'A%' or ename like 'M%';

name	length(ename)
Arnab	5
Madhav	6
Atul	4

21) Query to display Name, Hire Date and Day of the week on which the employee started.

50 • select ename,hire_date,dayname(hire_date) as week_day from employee;

ename	hire_date	week_day
vinohd	1981-09-08	Tuesday
Arnab	1983-01-12	Wednesday
niharika	1982-12-09	Thursday
rashika	1981-12-03	Thursday
madhav	1981-12-03	Thursday
vishnu	1982-01-23	Saturday
komal	1981-12-17	Thursday
riya	1981-02-20	Friday
bhawika	1981-02-22	Sunday

22) Query to display Name, Department Name and Department No for all the employees.

51 • select e.ename,d.dname,d.dno from employee e,department d where e.dno=d.dno;

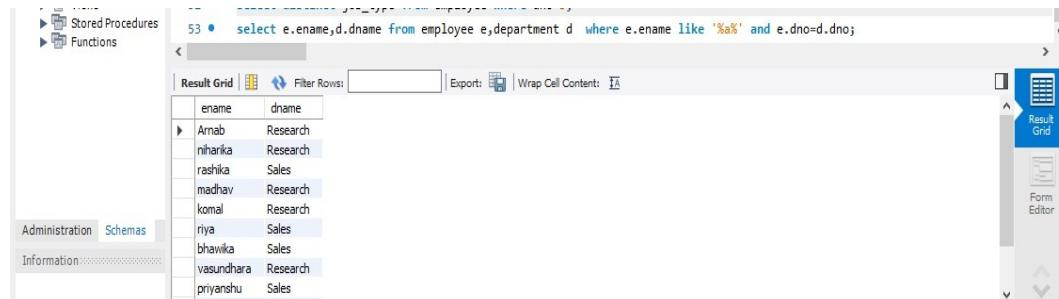
ename	dname	dno
Atul	Accounting	1
Shambhav	Accounting	1
Arnab	Research	2
niharika	Research	2
madhav	Research	2
komal	Research	2
vasundhara	Research	2
vinohd	Sales	3
rashika	Sales	3

23) Query to display Unique listing of all jobs in department #3.

52 • select distinct job_type from employee where dno=3;

job_type
sales-man
clerk
manager

24) Query to display Name, Dept Name of all employees who have an 'A' in their name.



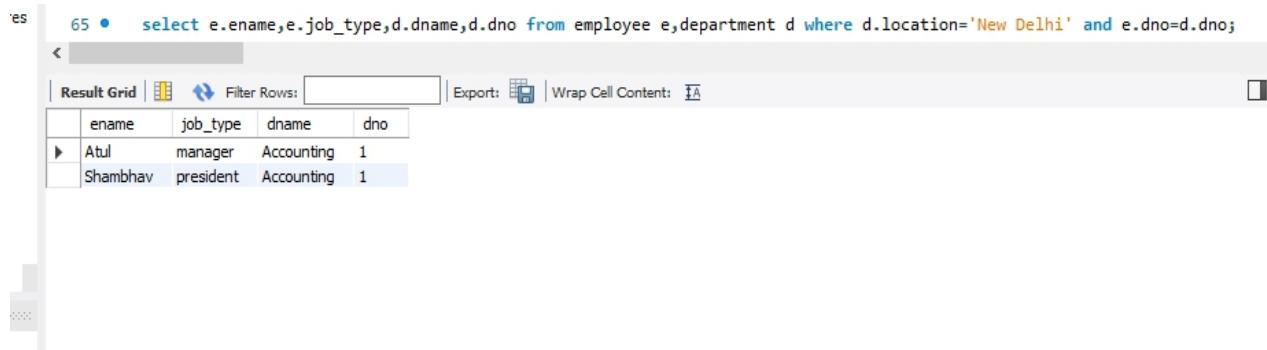
A screenshot of a database management tool showing the results of a query. The query is:

```
53 • select e.ename,d.dname from employee e,department d where e.ename like '%a%' and e.dno=d.dno;
```

The results are displayed in a grid:

ename	dname
Arnav	Research
niharika	Research
rashika	Sales
madhav	Research
komal	Research
riya	Sales
bhawika	Sales
vasundhara	Research
priyanshu	Sales

25) Query to display Name, Job, Department No. And Department Name for all the employees working at the Delhi location.



A screenshot of a database management tool showing the results of a query. The query is:

```
65 • select e.ename,e.job_type,d.dname,d.dno from employee e,department d where d.location='New Delhi' and e.dno=d.dno;
```

The results are displayed in a grid:

ename	job_type	dname	dno
Atul	manager	Accounting	1
Shambhav	president	Accounting	1

26) Query to display Name and Employee no. Along with their Manager's Name and the Manager's Employee no; along with the Employees' Name who do not have a Manager.

```
54 • select e.ename,e.eno,d.ename,d.eno from employee e left outer join employee d on e.eno=d.manager;
```

```
55
```

The screenshot shows the MySQL Workbench interface with the results of a SQL query. The query selects employee names and their manager's names and employee numbers from two tables: employee and employee. The results are displayed in a grid with four columns: ename, eno, d.ename, and d.eno. The data includes rows for employees like vinohd, Arnab, niharika, rashika, madhav, vishnu, komal, riya, and bhawika, with their respective manager details.

ename	eno	d.ename	d.eno
vinohd	100	priyanshu	60
Arnab	110	NULL	NULL
niharika	120	vishnu	150
rashika	130	komal	20
madhav	140	NULL	NULL
vishnu	150	NULL	NULL
komal	20	NULL	NULL
riya	30	NULL	NULL
bhawika	40	NULL	NULL

27) Query to display Name, Dept No. And Salary of any employee whose department No. and salary matches both the department no. And the salary of any employee who earns a commission.

The screenshot shows the MySQL Workbench interface with the results of a SQL query. The query selects employee names, department numbers, and salaries where the department number and salary of the current row are present in a subquery that filters for employees with a commission greater than 0. The results are displayed in a grid with three columns: ename, dno, and salary. The data includes rows for employees riya, bhawika, and priyanshu, all belonging to department 3 with salaries 2000.00, 1300.00, and 1250.00 respectively.

ename	dno	salary
riya	3	2000.00
bhawika	3	1300.00
priyanshu	3	1250.00

28) Query to display Name and Salaries represented by asterisks, where each asterisk (*) Signifies Rs 1000.

```
56 • select ename,repeat('*',(salary/1000)) as salary_in_stars from employee;
```

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

ename	salary_in_stars
vinohd	*
Arnab	*
niharika	***
rashika	*
madhav	***
vishnu	*
komal	*
riya	**
bhawika	*

29) Query to display the Highest, Lowest, Sum and Average Salaries of all the employees.

```
57 • select max(salary),min(salary),sum(salary),avg(salary) from employee;
```

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

max(salary)	min(salary)	sum(salary)	avg(salary)
2950.00	950.00	26870.00	1919.285714

30) Query to display the number of employees performing the same Job type functions.

```
58 • select job_type,count(*) from employee group by job_type;
```

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

job_type	count(*)
sales-man	4
clerk	4
analyst	1
analyst	1
manager	3
president	1

31) Query to display the no. of managers without listing their names.

The screenshot shows a database interface with a query window. The query is:

```
59 • select count(distinct manager) from employee;
```

The result grid displays one row with the value 7.

count(distinct manager)
7

32) Query to display the Department Name, Location Name, No. of Employees and the average salary for all employees in that department.

The screenshot shows a database interface with a query window. The query is:

```
59 • select d.dname,d.location,e.eno,avg(e.salary),count(*) from employee e,department d where e.dno=d.dno group by d.dname;
```

The result grid displays four rows of data.

dname	location	eno	avg(e.salary)	count(*)
Sales	Kolkata	100	1636.666667	6
Research	Gurgaon	110	1980.000000	5
Operation	Bangalore	150	1300.000000	1
Accounting	New Delhi	80	2925.000000	2

33) Query to display Name and Hire Date for all employees in the same dept. as atul.

```
60 • select ename,hire_date from employee where dno=(select dno from employee where ename='Atul');
```

ename	hire_date
Atul	1981-06-09
Shambhav	1981-11-17

34) Query to display the Employee No. And Name for all employees who earn more than the average salary.

eno	ename
120	niharika
140	madhav
30	riya
50	vasundhara
70	Dipanshu
80	Atul
90	Shambhav
NULL	NULL
NULL	NULL

35) Query to display Employee Number and Name for all employees who work in a department with any employee whose name contains a 'T'.

eno	ename

36) Query to display the names and salaries of all employees who report to vasundhra.

```
63 • select ename,salary from employee where manager=(select eno from employee where ename='vasundhra');
```

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

ename	salary
-------	--------

37) Query to display the department no, name and job for all employees in the Sales department.

```
64 • select dno,ename,job_type from employee where dno=(select dno from department where dname='sales');
```

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

dno	ename	job_type
3	vinohd	sales-man
3	rashika	clerk
3	riya	sales-man
3	bhawika	sales-man
3	priyanshu	sales-man
3	Dipanshu	manager

employee 42 X