

DBMS Lab

Assignment

Sub Code: CSE-227

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CSE - 3

Department of
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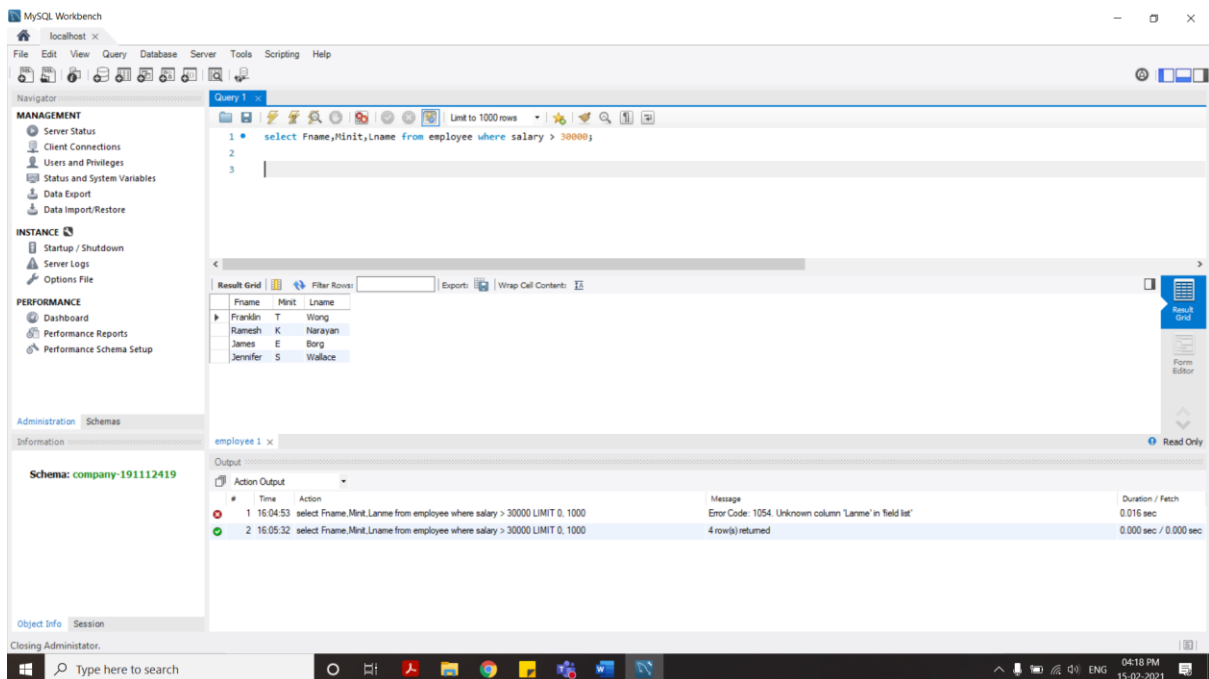
Date: 15/02/2021

Subject	DBMS LAB	Session: Jan- 2021
Sub. Code:	CSE-227	Semester: IV (CSE)
Name of Teacher	Dr. Sweta Jain, & Dr. Nikhil Kumar Singh	

DBMS: LAB-ASSIGNMENT 15-02-2021

Query 1:- Get the name of employees who earn a salary of more than 30000\$.

```
select Fname,Minit,Lname from employee where salary > 30000;
```



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

```
1 select Fname,Minit,Lname from employee where salary > 30000;
```

The query was executed, but an error occurred. The error message is displayed in the Output pane:

```
1 16:04:53 select Fname,Minit,Lname from employee where salary > 30000 LIMIT 0, 1000 Error Code: 1054. Unknown column 'Lname' in 'field list' 0.016 sec
2 16:05:32 select Fname,Minit,Lname from employee where salary > 30000 LIMIT 0, 1000 4 row(s) returned 0.000 sec / 0.000 sec
```

The error message indicates that the column 'Lname' is unknown in the field list. The correct column name should be 'Lastname'.

Query 2: Get the name of the employee whose last name begins with 'W'

```
select Fname,Minit,Lname from employee where Lname like 'W%';
```

The screenshot shows the MySQL Workbench interface. The 'Query 1' editor contains the following SQL code:

```
1 select Fname,Minit,Lname from employee where salary > 30000;
2
3 select Fname,Minit,Lname from employee where Lname like 'W%';
4
5
```

The 'Result Grid' shows the results of the second query:

Fname	Minit	Lname
Franklin	T	Wong
Jennifer	S	Wallace

The 'Output' pane shows the execution log:

#	Time	Action	Message	Duration / Fetch
1	16:04:53	select Fname,Minit,Lname from employee where salary > 30000 LIMIT 0, 1000	Error Code: 1054. Unknown column 'Lname' in field list	0.016 sec
2	16:05:32	select Fname,Minit,Lname from employee where salary > 30000 LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec
3	16:19:31	select Fname,Minit,Lname from employee where Lname like 'W%' LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
4	16:19:47	select Fname,Minit,Lname from employee where Lname like 'W%' LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec

Query3: - If the Company wants to give increment to those employees who earn less than 25000\$ by 10%, then get the increment amount of salary.

```
select Ssn, Fname, Salary + Salary*0.1 as Incremented_Salary from employee
where Salary<=25000;
```

The screenshot shows the MySQL Workbench interface. The 'Query 1' editor contains the following SQL code:

```
1 select Fname,Minit,Lname from employee where salary > 30000;
2
3 select Fname,Minit,Lname from employee where Lname like 'W%';
4
5 select Ssn, Fname, Salary + Salary*0.1 as Incremented_Salary from employee where Salary<=25000;
```

The 'Result Grid' shows the results of the fifth query:

Ssn	Fname	Incremented_Salary
453453453	Joyce	27500.000
987987987	Ahmad	27500.000
999887777	Alicia	27500.000

The 'Output' pane shows the execution log:

#	Time	Action	Message	Duration / Fetch
1	16:04:53	select Fname,Minit,Lname from employee where salary > 30000 LIMIT 0, 1000	Error Code: 1054. Unknown column 'Lname' in field list	0.016 sec
2	16:05:32	select Fname,Minit,Lname from employee where salary > 30000 LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec
3	16:19:31	select Fname,Minit,Lname from employee where Lname like 'W%' LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
4	16:19:47	select Fname,Minit,Lname from employee where Lname like 'W%' LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec
5	16:24:53	select Ssn, Fname, Salary + Salary*0.1 from employee where Salary<=25000 LIMIT 0, 1000	3 row(s) returned	0.016 sec / 0.000 sec
6	16:25:23	select Ssn, Fname, Salary + Salary*0.1 as Incremented_Salary from employee where Salary<=25000 LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec

Query 4: Get the department number whose belongs to a location that name end with 'D'

```
select Dnumber from dept_locations where Dlocation like '%d';
```

The screenshot shows the MySQL Workbench interface. The 'Query' tab is active, displaying the following SQL query:

```
1 select Fname,Minit,Lname from employee where salary > 30000;
2
3 select Fname,Minit,Lname from employee where Lname like 'W%';
4
5 select Ssn, Fname, Salary + Salary*0.1 as Incremented_Salary from employee where Salary<=25000;
6
7 select Dnumber from dept_locations where Dlocation like 'd';
```

The 'Result Grid' shows the results of the last query (Query 4):

Dnumber
4
5

The 'Output' tab shows the execution details of the queries:

#	Time	Action	Message	Duration / Fetch
1	16:04:53	select Fname,Minit,Lname from employee where salary > 30000 LIMIT 0, 1000	Error Code: 1054. Unknown column 'Lname' in field list	0.016 sec
2	16:05:32	select Fname,Minit,Lname from employee where salary > 30000 LIMIT 0, 1000	4 row(s) returned	0.000 sec / 0.000 sec
3	16:19:31	select Fname,Minit,Lname from employee where Lname like 'W%' LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
4	16:19:47	select Fname,Minit,Lname from employee where Lname like 'W%' LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec
5	16:24:53	select Ssn, Fname, Salary + Salary*0.1 from employee where Salary<=25000 LIMIT 0, 1000	3 row(s) returned	0.016 sec / 0.000 sec
6	16:25:23	select Ssn, Fname, Salary + Salary*0.1 as Incremented_Salary from employee where Salary<=25000 LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
7	16:26:55	select Dnumber from dept_locations where Dlocation like 'd' LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec

Query 5: Get the detail of employee in sorted form according to their salary in increasing order.

```
select * from employee order by salary asc;
```

The screenshot shows the MySQL Workbench interface. The 'Query' tab is active, displaying the following SQL query:

```
2
3 select Fname,Minit,Lname from employee where Lname like 'W%';
4
5 select Ssn, Fname, Salary + Salary*0.1 as Incremented_Salary from employee where Salary<=25000;
6
7 select Dnumber from dept_locations where Dlocation like 'd';
8
9 select * from employee order by salary asc;
```

The 'Result Grid' shows the results of the last query (Query 5):

Fname	Minit	Lname	Ssn	Bdate	Address	Sex	Salary	Super_ssn	Dno
Joyce	A	English	453453453	1972-07-31	5631 Rice, Houston TX	F	25000.00	333445555	5
Ahmad	V	Jebbar	987987987	1969-03-29	980 Dallas, Houston TX	M	25000.00	987654321	4
Alicia	J	Zelaya	999887777	1968-01-19	3321 Castle, Spring TX	F	25000.00	987654321	4
John	B	Smith	123456789	1965-01-09	731 Fondren, Houston TX	M	30000.00	333445555	5
Ramesh	K	Narayan	666884444	1962-09-15	975 Fire Oak, Humble TX	M	38000.00	333445555	5
Franklin	T	Wong	333445555	1965-12-08	638 Voss, Houston TX	M	40000.00	888665555	5
Jennifer	S	Wallace	987654321	1941-06-20	291 Berry, Bellare TX	F	43000.00	888665555	4
James	E	Borg	888665555	1937-11-10	450 Stone, Houston TX	M	55000.00	NULL	1

The 'Output' tab shows the execution details of the queries:

#	Time	Action	Message	Duration / Fetch
4	16:19:47	select Fname,Minit,Lname from employee where Lname like 'W%' LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec
5	16:24:53	select Ssn, Fname, Salary + Salary*0.1 from employee where Salary<=25000 LIMIT 0, 1000	3 row(s) returned	0.016 sec / 0.000 sec
6	16:25:23	select Ssn, Fname, Salary + Salary*0.1 as Incremented_Salary from employee where Salary<=25000 LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
7	16:26:55	select Dnumber from dept_locations where Dlocation like 'd' LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec
8	16:28:07	select * from employee order by salary asc LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec

Query 6: Get the details of employee who works in the headquarters and research department.
(By using IN clause)

```
select * from employee where Dno in (select Dnumber from department where Dname in ('Headquarters','Research'));
```

The screenshot shows the MySQL Workbench interface. The 'Query' tab is active, displaying the following SQL query:

```
3 select Fname,Minit,Lname from employee where Lname like 'u%';
4
5 select Ssn, Fname, Salary + Salary*0.1 as Incremented_Salary from employee where Salary<=25000;
6
7 select Dnumber from dept_locations where Dlocation like 'd';
8
9 select * from employee order by salary asc;
10
11 select * from employee where Dno in (select Dnumber from department where Dname in ('headquarters','Research'));
```

The 'Result Grid' shows the results of the query. The columns are: Fname, Minit, Lname, Ssn, Bdate, Address, Sex, Salary, Super_ssn, and Dno. The results are as follows:

Fname	Minit	Lname	Ssn	Bdate	Address	Sex	Salary	Super_ssn	Dno
James	E	Borg	888665555	1937-11-10	450 Stone, Houston TX	M	55000.00	333445555	1
John	B	Smith	123456789	1965-01-09	731 Fondren, Houston TX	M	30000.00	333445555	5
Franklin	T	Wong	333445555	1965-12-08	638 Voss, Houston TX	M	40000.00	888665555	5
Joyce	A	English	453453453	1972-07-31	5631 Rice, Houston TX	F	25000.00	333445555	5
Ramesh	K	Narayan	666884444	1962-09-15	975 Pine Oak, Humble TX	M	38000.00	333445555	5

The 'Output' tab shows the execution of the query, with the following actions and messages:

#	Time	Action	Message	Duration / Fetch
6	16:25:23	select Ssn, Fname, Salary + Salary*0.1 as Incremented_Salary from employee where Salary<=25000 LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec
7	16:26:55	select Dnumber from dept_locations where Dlocation like 'd' LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec
8	16:28:07	select * from employee order by salary asc LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
9	16:32:15	select * from employee where Dno in (select Dnumber from department where Dname in ('Headquarters','Research'))	4 row(s) returned	0.000 sec / 0.000 sec
10	16:33:07	select * from employee where Dno in (select Dnumber from department where Dname in ('Headquarters','Research'))	5 row(s) returned	0.000 sec / 0.000 sec

All Sql Queries:

```
select Fname,Minit,Lname from employee where salary > 30000;
```

```
select Fname,Minit,Lname from employee where Lname like 'W%';
```

```
select Ssn, Fname, Salary + Salary*0.1 as Incremented_Salary from employee where Salary<=25000;
```

```
select Dnumber from dept_locations where Dlocation like '%d';
```

```
select * from employee order by salary asc;
```

```
select * from employee where Dno in (select Dnumber from department where Dname in ('Headquarters','Research'));
```