

Indian Institute of Information Technology Dharwad, Karnataka

Name:- Dhanisht Kumar (20bcs040)

Course:- DBMS(CS310)

Task:- Assignment-4 (Updated)

Aim:

The aim of this assignment to add some more rows of data in the previous **employee** database and to perform some more operation on **employee** database. By completing this task we shall have better handson in SQL query.

SQL Code Snippet (Updated in Assignment-04):

```
/* SQL Code for assignment-04 (Updated employee Database)*/  
  
insert into department values('aa301', 'software', 000000009, 'autoA');  
  
select * from department;  
  
insert into project values('autoattn', 'aa301', 'Project on a automatic attendance system',  
'2023-10-10', '2024-11-06', 2900000000.00); // Inserting a project which will be started in future(10/10/2023)  
  
select * from project  
  
where startdate > '2022-06-10'; // selecting project which will start in future but generating revenue  
  
select projectid, startdate, stopdate,  
DATEDIFF(startdate, stopdate) as Date_difference from project; //applying DATEDIFF() function to find date differ  
  
select distinct startdate from project;  
  
select projectid, startdate from project  
  
order by startdate; // retrieving rows in ascending order of the start date  
  
select avg(salary) as Avg_salary from employee; // Using Aggregate function to find average salary  
  
select min(salary) as Minimum_salary from employee; // Using Aggregate function to find min salary  
  
select max(salary) as Miximum_salary from employee; // Using Aggregate function to find Max salary  
  
select * from employee  
  
where firstname like 'a%'; // select employees whose first name is starting with 'a'
```

```
select * from employee

where length(firstname)=6; // select employees whose name contains 6 character (Using 'length()' function)

insert into department values('BB444', 'SFkmt', 000000010, 'BcutB');

insert into employee values(000000009, 'Mac', 'Donald', 'BB444', 0068000.00);

/* 1st way to retrieve the rows of employee who works in two department (by using self join)*/

/*select employeeID from employee as T1, employee as T2

where T1.employeeID=T2.employeeID and T1.deptcode <> T2.deptcode; */

/* 2nd way to retrieve the rows of employee who works in two department (using where clause and condition)*/

select employeeID from employee

where deptcode in

(select deptcode from department group by deptcode

having count(*)>1);

select min(salary) as Minimum_salary, max(salary) as Maximum_salary

from employee;
```

Screenshots of SQL Codes and Tables:

MySQL Workbench

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Navigator: 20bcs040_assignment (SQL scrip... x)

SCHEMAS

Filter objects

- hospitaldb
- railway
- sys

Administration Schemas

Information

No object selected

Object Info Session

Assignment-02*

20bcs040_assignment (SQL scrip... x)

Limit to 1000 rows

```
79
80 • insert into department values('aa301', 'software', 000000009, 'autoA');
81 • select * from department;
82 • insert into project values('autoattn', 'aa301', 'Project on a automatic attendance system',
83   '2023-10-10', '2024-11-06', 2900000000.00);
84 • select * from project
85   where startdate > '2022-06-10';
```

Result Grid

projectid	deptcode	projdescription	startdate	stopdate	revenue
autoattn	aa301	Project on a automatic attendance system	2023-10-10	2024-11-06	2900000000.00

Output

Action Output

#	Time	Action	Message	Duration / Fetch
21	20:27:35	insert into department values('aa301', 'software', 000000009, 'autoA')	1 row(s) affected	0.250 sec
22	20:27:55	select * from department LIMIT 0, 1000	9 row(s) returned	0.015 sec / 0.000 sec
23	20:28:04	insert into project values('autoattn', 'aa301', 'Project on a automatic attendance system', '2023-10-10', '2024-11-06', 2900000000.00);	1 row(s) affected	0.110 sec
24	20:28:12	select * from project LIMIT 0, 1000	9 row(s) returned	0.000 sec / 0.000 sec
25	20:36:28	select * from project where startdate > '2022-06-10' LIMIT 0, 1000	1 row(s) returned	0.047 sec / 0.000 sec

SQLAdditions

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Navigator: 20bcs040_assignment (SQL scrip... x)

SCHEMAS

Filter objects

- hospitaldb
- railway
- sys

Administration Schemas

Information

No object selected

Assignment-02*

20bcs040_assignment (SQL scrip... x)

Limit to 1000 rows

```
83 • '2023-10-10', '2024-11-06', 2900000000.00);
84 • select * from project
85   where startdate > '2022-06-10';
86
87 • select projectid, startdate, stopdate,
88   DATEDIFF(startdate, stopdate) as Date_difference from project;
89
```

Result Grid

projectid	startdate	stopdate	Date_difference
abfpg534	2020-01-23	2022-04-20	-818
absdesig	2019-05-01	2023-03-20	-1419
amnstee	2019-05-01	2029-10-15	-3820
aurdnob	2019-05-01	2025-03-20	-2150
autoattn	2023-10-10	2024-11-06	-393
csebda24	2021-01-23	2022-06-02	-495
electron	2019-05-01	2025-03-20	-2150
wfm20134	2022-02-03	2022-05-03	-89
ybs34000	2019-05-01	2021-06-02	-763

Output

Action Output

SQLAdditions

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MySQL Workbench

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Navigator: 20bcs040_assignment (SQL scrip... x)

SCHEMAS

Filter objects

hospitaldb
railway
sys

Administration Schemas

Information

No object selected

Assignment-02*

```

84 • select * from project
85 where startdate > '2022-06-10';
86
87 • select projectid, startdate, stopdate,
88 DATEDIFF(startdate, stopdate) as Date_difference from project;
89 • select distinct startdate from project;
90

```

Result Grid

startdate
2020-01-23
2019-05-01
2023-10-10
2021-01-23
2022-02-03

project 13 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
29	20:45:33	select datediff(month, '2022-02-03', '2022-05-03') as dateDiff LIMIT 0, 1000	Error Code: 1582. Incorrect parameter count in the call to native function 'datediff'	0.000 sec
30	20:50:58	select projectid, startdate, stopdate, DATEDIFF(startdate, stopdate) as Date_difference from ...	9 row(s) returned	0.047 sec / 0.000 sec
31	20:51:33	select projectid, startdate, stopdate, DATEDIFF(year, startdate, stopdate) as Date_difference ...	Error Code: 1582. Incorrect parameter count in the call to native function 'DATEDIFF'	0.000 sec
32	20:51:45	select projectid, startdate, stopdate, DATEDIFF(year, startdate, stopdate) as Date_difference...	Error Code: 1064. You have an error in your SQL syntax; check the manual that corresponds to...	0.000 sec
33	20:53:57	select distinct startdate from project LIMIT 0, 1000	5 row(s) returned	0.016 sec / 0.000 sec

Object Info Session

MySQL Workbench

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Navigator: 20bcs040_assignment (SQL scrip... x)

SCHEMAS

Filter objects

hospitaldb
railway
sys

Administration Schemas

Information

No object selected

Assignment-02*

```

86
87 • select projectid, startdate, stopdate,
88 DATEDIFF(startdate, stopdate) as Date_difference from project;
89 • select distinct startdate from project;
90
91 • select projectid, startdate from project
92 order by startdate;

```

Result Grid

projectid	startdate
absdesig	2019-05-01
amnstee	2019-05-01
aurdnob	2019-05-01
electoni	2019-05-01
ybs34000	2019-05-01
abfpg534	2020-01-23
csebd24	2021-01-23
wfm20134	2022-02-03
autoatn	2023-10-10

project 20 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
36	20:56:12	select * from workson LIMIT 0, 1000	8 row(s) returned	0.015 sec / 0.000 sec
37	20:56:37	select * from project LIMIT 0, 1000	9 row(s) returned	0.000 sec / 0.000 sec
38	20:56:54	select * from department LIMIT 0, 1000	9 row(s) returned	0.000 sec / 0.000 sec
39	21:04:36	select projectid, startdate from project LIMIT 0, 1000	9 row(s) returned	0.000 sec / 0.000 sec
40	21:07:22	select projectid, startdate from project order by startdate LIMIT 0, 1000	9 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

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Navigator: 20bca040_assignment (SQL scrip...)

SCHEMAS

Filter objects

- hospitaldb
- railway
- sys

Administration Schemas

Information

No object selected

Assignment-02*

20bca040_assignment (SQL scrip...)

Limit to 1000 rows

```

88 DATEDIFF(startdate, stopdate) as Date_difference from project;
89 select distinct startdate from project;
90
91 select projectid, startdate from project
92 order by startdate;
93 select avg(salary) as Avg_salary from employee;
94
95

```

Result Grid

Avg_salary
156125.000000

Output

Action Output

#	Time	Action	Message	Duration / Fetch
43	21:14:08	select avg(salary) from employee LIMIT 0, 1000	1 row(s) returned	0.046 sec / 0.000 sec
44	21:14:45	select avg(salary) as Avg_salary from employee LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
45	21:14:59	select * from employee LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
46	21:16:40	select avg(salary) as Avg_salary from employee LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

SQL Additions

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Navigator: 20bca040_assignment (SQL scrip...)

SCHEMAS

Filter objects

- hospitaldb
- railway
- sys

Administration Schemas

Information

No object selected

Assignment-02*

20bca040_assignment (SQL scrip...)

Limit to 1000 rows

```

89 select distinct startdate from project;
90
91 select projectid, startdate from project
92 order by startdate;
93 select avg(salary) as Avg_salary from employee;
94 select employeeID, firstname, lastname, min(salary) as Min_salary from employee;
95

```

Result Grid

employeeID	firstname	lastname	Min_salary
1	Alex	pop	50000.00

Output

Action Output

#	Time	Action	Message	Duration / Fetch
44	21:14:45	select avg(salary) as Avg_salary from employee LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
45	21:14:59	select * from employee LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
46	21:16:40	select avg(salary) as Avg_salary from employee LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
47	21:19:58	select employeeID, firstname, lastname, min(salary) as Min_salary from employee LIMIT 0, 1000	1 row(s) returned	0.016 sec / 0.000 sec

Object Info Session

SQL Additions

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Navigator: 20bcs040_assignment (SQL scrip...)

SCHEMAS

Filter objects

- hospitaldb
- railway
- sys

Administration Schemas

Information

No object selected

Assignment-02*

```

89 • select distinct startdate from project;
90
91 • select projectid, startdate from project
92   order by startdate;
93 • select avg(salary) as Avg_salary from employee;
94 • select min(salary) as Minimum_salary from employee;
95

```

Result Grid

Minimum_salary
50000.00

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 46	21:16:40	select avg(salary) as Avg_salary from employee LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
✓ 47	21:19:58	select employeeID, firstname, lastname, min(salary) as Min_salary from employee LIMIT 0, 1000	1 row(s) returned	0.016 sec / 0.000 sec
✓ 48	21:20:26	select * from employee LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
✓ 49	21:21:02	select min(salary) as Minimum_salary from employee LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

MySQL Workbench

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Navigator: 20bcs040_assignment (SQL scrip...)

SCHEMAS

Filter objects

- hospitaldb
- railway
- sys

Administration Schemas

Information

No object selected

Assignment-02*

```

90
91 • select projectid, startdate from project
92   order by startdate;
93 • select avg(salary) as Avg_salary from employee;
94 • select min(salary) as Minimum_salary from employee;
95 • select max(salary) as Maximum_salary from employee;
96

```

Result Grid

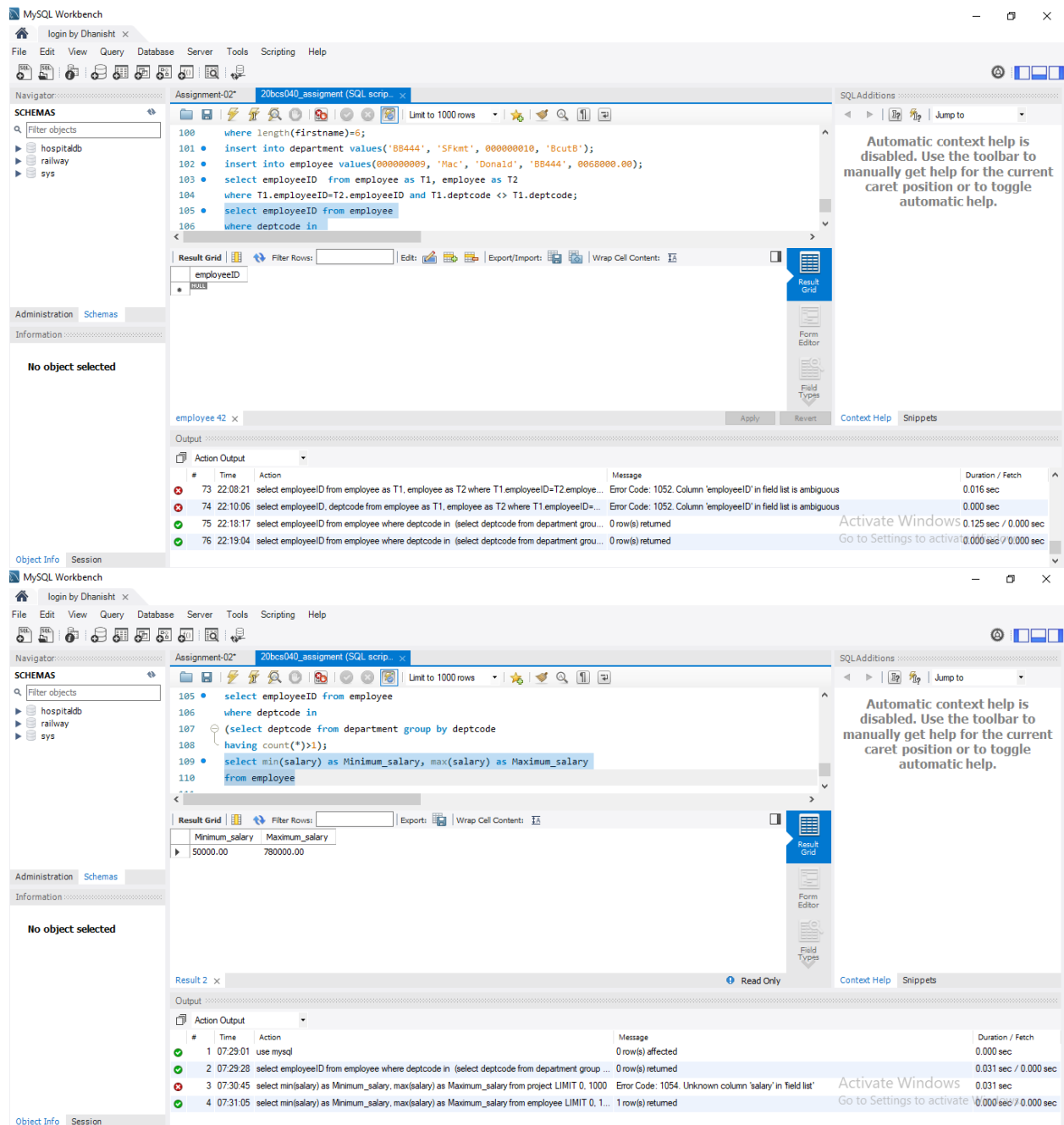
Maximum_salary
780000.00

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 48	21:20:26	select * from employee LIMIT 0, 1000	8 row(s) returned	0.000 sec / 0.000 sec
✓ 49	21:21:02	select min(salary) as Minimum_salary from employee LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec
✓ 50	21:21:40	select max(salary) as Maximum_salary from employee LIMIT 0, 1000	1 row(s) returned	0.047 sec / 0.000 sec
✓ 51	21:21:53	select max(salary) as Maximum_salary from employee LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

Object Info Session



- Screenshots of all the commands and associated tables (above) by following all the 12 instruction given in the assignment.

