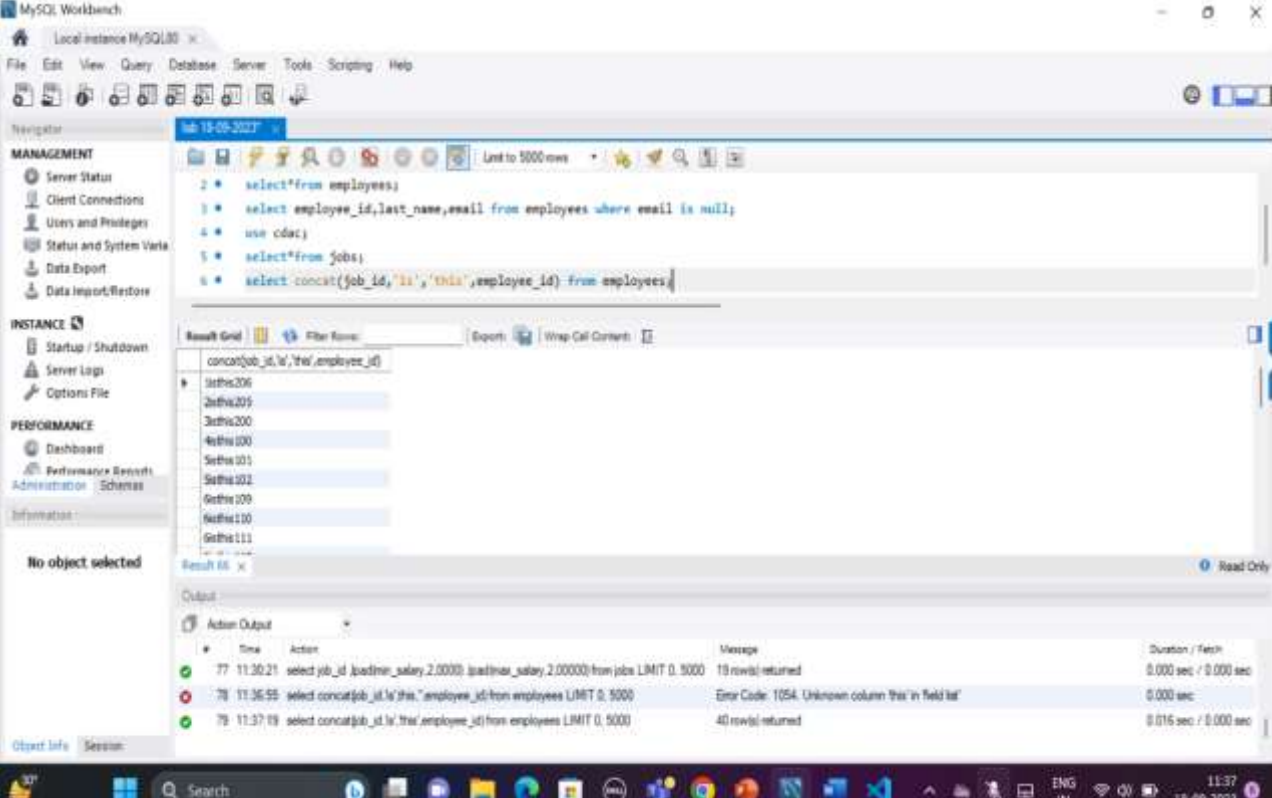


Assignment -03

Character and Number Function

1. Write a query to get the job_id and related employee's id.
Code:-



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

```
2 * select*from employees;
3 * select employee_id,last_name,email from employees where email is null;
4 * use cdac;
5 * select*from jobs;
6 * select concat(job_id,'||','0000',employee_id) from employees;
```

The Results Grid shows the output of the last query, displaying the concatenated job_id and employee_id for 10 rows:

concat(job_id,' ','0000',employee_id)
1000000000
1000000000
1000000000
1000000000
1000000000
1000000000
1000000000
1000000000
1000000000
1000000000

The Action Output pane shows the execution log:

#	Time	Action	Message	Duration / Fetch
77	11:30:21	select job_id, (select min_salary, 2.00000) (select max_salary, 2.00000) from jobs LIMIT 0, 5000	10 rows(s) returned	0.000 sec / 0.000 sec
78	11:36:55	select concat(job_id,' ','0000',employee_id) from employees LIMIT 0, 5000	Error Code: 1054. Unknown column ' ' in field list	0.000 sec
79	11:37:19	select concat(job_id,' ','0000',employee_id) from employees LIMIT 0, 5000	40 rows(s) returned	0.016 sec / 0.000 sec

2. Write a query to update the portion of the phone_number in the employees table, within the phone number the substring '124' will be replaced by '999'.

Code:

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

```
1 use cdac;
2 select * from employees;
3 select employee_id, last_name, email from employees where email is null;
4 use cdac;
5 select *, replace(phone_number, 124, 999) from employees;
```

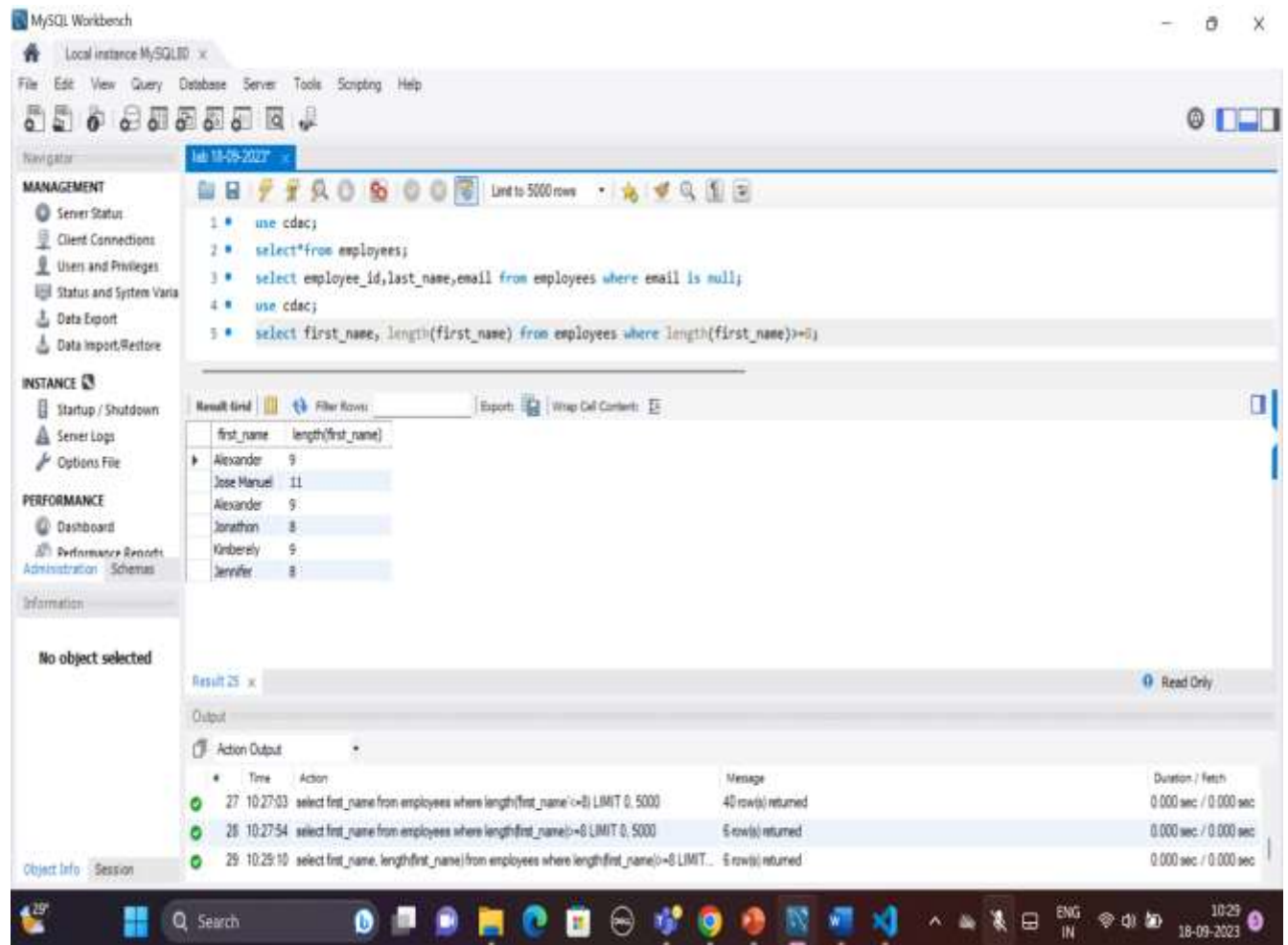
The result grid displays the output of the query, showing columns: employee_id, first_name, last_name, email, phone_number, hire_date, job_id, salary, manager_id, department_id, and replace(phone_number, 124, 999). The data is as follows:

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	manager_id	department_id	replace(phone_number, 124, 999)
104	Bruce	Ernst	bruce.ernst@sqltutorial.org	590.423.4568	1991-05-21	9	6000.00	103	6	590.423.4568
105	David	Austin	david.austin@sqltutorial.org	590.423.4569	1997-06-25	9	4800.00	103	6	590.423.4569
106	Valli	Pataballa	valli.pataballa@sqltutorial.org	590.423.4560	1998-02-05	9	4800.00	103	6	590.423.4560
107	Diana	Lorentz	diana.lorentz@sqltutorial.org	590.423.5567	1999-02-07	9	4200.00	103	6	590.423.5567
108	Nancy	Greenberg	nancy.greenberg@sqltutorial.org	515.124.4569	1994-08-17	7	12000.00	101	10	515.999.4569
109	Daniel	Faviet	daniel.faviet@sqltutorial.org	515.124.4369	1994-08-16	6	9000.00	108	10	515.999.4369
110	John	Chen	john.chen@sqltutorial.org	515.124.4269	1997-09-28	6	8200.00	108	10	515.999.4269
111	Ismail	Sciarra	ismael.sciarra@sqltutorial.org	515.124.4369	1997-09-30	6	7700.00	108	10	515.999.4369
112	Jose Manuel	Urman	jose.manuel.urman@sqltutorial.org	515.124.4469	1998-03-07	6	7800.00	108	10	515.999.4469
113	Luis	Popp	luis.popp@sqltutorial.org	515.124.4567	1999-12-07	6	6900.00	108	10	515.999.4567

The Action Output pane shows the execution of the query, indicating that 42 rows were returned.

3. Write a query to get the details of the employees where the length of the first name greater than or equal to 8.

Code:-



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

```
1 use cdac;
2 select*from employees;
3 select employee_id,last_name,email from employees where email is null;
4 use cdac;
5 select first_name, length(first_name) from employees where length(first_name)>=8;
```

The results of the last query are displayed in a table with the following data:

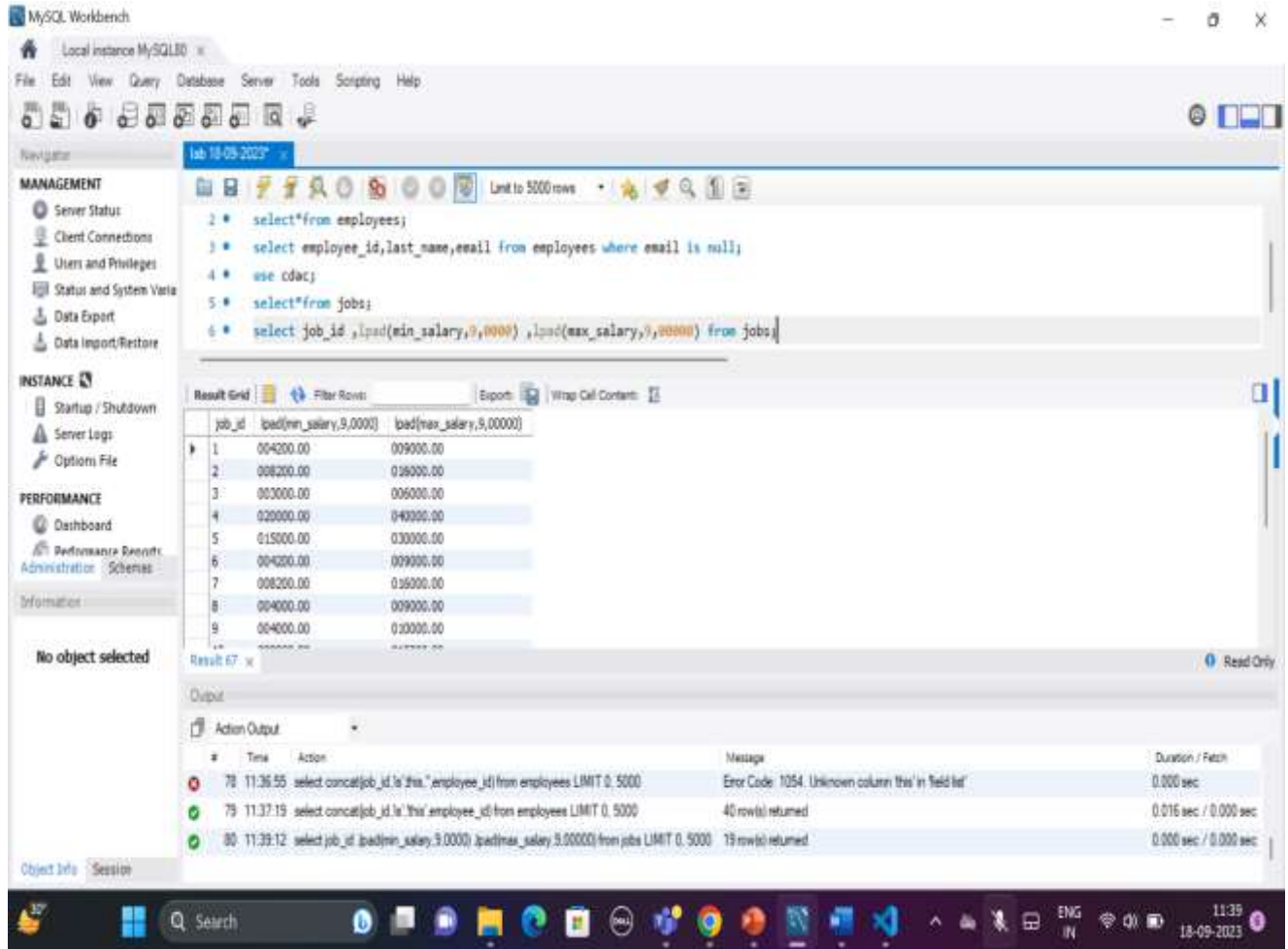
first_name	length(first_name)
Alexander	9
Jose Manuel	11
Alexander	9
Jonathan	8
Kimberly	9
Jennifer	8

The bottom panel shows the Action Output log with the following entries:

#	Time	Action	Message	Duration / Fetch
27	10:27:53	select first_name from employees where length(first_name)>=8 LIMIT 0, 5000	40 row(s) returned	0.000 sec / 0.000 sec
28	10:27:54	select first_name from employees where length(first_name)>=8 LIMIT 0, 5000	6 row(s) returned	0.000 sec / 0.000 sec
29	10:29:10	select first_name, length(first_name) from employees where length(first_name)>=8 LIMIT 0, 5000	6 row(s) returned	0.000 sec / 0.000 sec

4. Write a query to display leading zeros before maximum and minimum salary.

Code:



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

```
2 * select*from employees;
3 * select employee_id,last_name,email from employees where email is null;
4 * use cdac;
5 * select*from jobs;
6 * select job_id ,lpad(min_salary,9,0000) ,lpad(max_salary,9,0000) from jobs;
```

The Results window displays the output of the last query, showing job IDs and their corresponding minimum and maximum salaries with leading zeros.

job_id	lpad(min_salary,9,0000)	lpad(max_salary,9,0000)
1	004200.00	009000.00
2	008200.00	036000.00
3	003000.00	006000.00
4	020000.00	040000.00
5	015000.00	030000.00
6	004200.00	009000.00
7	008200.00	036000.00
8	004000.00	009000.00
9	004000.00	030000.00

The Output window shows the execution log with the following entries:

#	Time	Action	Message	Duration / Fetch
78	11:36:55	select concat(job_id,'this','employee_id') from employees LIMIT 0, 5000	Error Code: 1054. Unknown column 'this' in 'field list'	0.000 sec
79	11:37:19	select concat(job_id,'this','employee_id') from employees LIMIT 0, 5000	40 row(s) returned	0.016 sec / 0.000 sec
80	11:39:12	select job_id ,lpad(min_salary,9,0000) ,lpad(max_salary,9,0000) from jobs LIMIT 0, 5000	19 row(s) returned	0.000 sec / 0.000 sec

5. Write a query to append '@example.com' to email field.

Code:

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

```
1 use cdac;
2 select * from employees;
3 select employee_id, last_name, email from employees where email is null;
4 use cdac;
5 select *, concat(email, '@example.com') from employees;
```

The result set shows the output of the query, displaying columns: employee_id, first_name, last_name, email, phone_number, hire_date, job_id, salary, manager_id, department_id, and concat(email, '@example.com'). The data is as follows:

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	manager_id	department_id	concat(email, '@example.com')
1	Steven	King	steven.king@sqltutorial.org	515.122.4567	1987-06-17	4	24000.00	1000	9	steven.king@sqltutorial.org@example.com
2	Neena	Kochhar	neena.kochhar@sqltutorial.org	515.122.4568	1989-09-21	5	17000.00	100	9	neena.kochhar@sqltutorial.org@example.com
3	Lex	De Haan	lex.de.haan@sqltutorial.org	515.122.4569	1993-01-13	5	17000.00	100	9	lex.de.haan@sqltutorial.org@example.com
4	Alexander	Hunold	alexander.hunold@sqltutorial.org	590.423.4567	1990-01-03	9	9000.00	102	6	alexander.hunold@sqltutorial.org@example.com
5	Bruce	Ernst	bruce.ernst@sqltutorial.org	590.423.4568	1991-05-21	9	6000.00	103	6	bruce.ernst@sqltutorial.org@example.com
6	David	Austin	david.austin@sqltutorial.org	590.423.4569	1997-06-25	9	4800.00	103	6	david.austin@sqltutorial.org@example.com
7	Valli	Patoballa	valli.patoballa@sqltutorial.org	590.423.4560	1998-02-05	9	4800.00	103	6	valli.patoballa@sqltutorial.org@example.com
8	Diana	Lorentz	diana.lorentz@sqltutorial.org	590.423.5567	1999-02-07	9	4300.00	103	6	diana.lorentz@sqltutorial.org@example.com
9	Nancy	Greenberg	nancy.greenberg@sqltutorial.org	515.124.4569	1994-08-17	7	12000.00	101	10	nancy.greenberg@sqltutorial.org@example.com
10	Daniel	Faviet	daniel.faviet@sqltutorial.org	515.124.4089	1994-08-26	6	9000.00	108	10	daniel.faviet@sqltutorial.org@example.com
11	John	Chen	john.chen@sqltutorial.org	515.124.4369	1997-09-28	6	8300.00	108	10	john.chen@sqltutorial.org@example.com

6. Write a query to get the employee id, first name and hire month.

Code :

The screenshot shows the MySQL Workbench interface. The left sidebar contains navigation panels for 'MANAGEMENT' (Server Status, Client Connections, Users and Privileges, Status and System Variables, Data Export, Data Import/Restore) and 'INSTANCE' (Startup / Shutdown, Server Logs, Options File). The 'PERFORMANCE' panel is also visible with options for Dashboard, Performance Results, Administration, and Schemas. The main editor window displays five SQL queries:

```
1 use cdac;
2 select*from employees;
3 select employee_id,last_name,email from employees where email is null;
4 use cdac;
5 select employee_id,first_name,hire_date,concat(employee_id,first_name,hire_date) from employees;
```

The 'Result Grid' shows the output of the fifth query, displaying columns: employee_id, first_name, hire_date, and concat(employee_id,first_name,hire_date). The results are as follows:

employee_id	first_name	hire_date	concat(employee_id,first_name,hire_date)
100	Steven	1987-06-17	100Steven1987-06-17
101	Neena	1989-09-21	101Neena1989-09-21
102	Lex	1993-01-13	102Lex1993-01-13
103	Alexander	1990-01-03	103Alexander1990-01-03
104	Bruce	1991-05-21	104Bruce1991-05-21
105	David	1997-06-25	105David1997-06-25
106	Valli	1998-02-05	106Valli1998-02-05
107	Diana	1999-02-07	107Diana1999-02-07
108	Nancy	1994-08-17	108Nancy1994-08-17
109	Daniel	1994-08-16	109Daniel1994-08-16
110	John	1997-09-28	110John1997-09-28
111	Ismael	1997-09-30	111Ismael1997-09-30

The bottom status bar shows the current session information, including the time (10:41) and date (18-09-2023).

7. Write a query to get the employee id, email id (discard the last three characters).

Code:-

The screenshot shows the MySQL Workbench interface with the following content:

SQL Editor:

```
1 • use cdac;
2 • select*from employees;
3 • select employee_id,last_name,email from employees where email is null;
4 • use cdac;
5 • select employee_id,substring_index(email,'.',2) from employees;
```

Result Grid:

employee_id	substring_index(email,'.',2)
100	steven.king@sqltutorial
101	neena.kochhar@sqltutorial
102	lex.de haan@sqltutorial
103	alexander.hunold@sqltutorial
104	bruce.emst@sqltutorial
105	devil.austin@sqltutorial
106	valli.pataballa@sqltutorial
107	diana.lorenz@sqltutorial
108	nancy.greenberg@sqltutorial

Action Output:

#	Time	Action	Message	Duration / Fetch
41	10:55:28	select employee_id,substring_index(email,'.',2) from employees LIMIT 0, 5000	40 row(s) returned	0.000 sec / 0.000 sec
42	10:55:30	select*from employees LIMIT 0, 5000	40 row(s) returned	0.000 sec / 0.000 sec
43	10:55:47	select employee_id,substring_index(email,'.',2) from employees LIMIT 0, 5000	40 row(s) returned	0.000 sec / 0.000 sec

8. Write a query to find all employees where first names are in upper case.

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

18-09-2023

Limit to 5000 rows

MANAGEMENT

- Server Status
- Client Connections
- Users and Privileges
- Status and System Variables
- Data Export
- Data Import/Restore

INSTANCE

- Startup / Shutdown
- Server Logs
- Options File

PERFORMANCE

- Dashboard
- Performance Reports
- Administration
- Schemas

Information

No object selected

```
1 • use cdac;
2 • select*from employees;
3 • select first_name ,upper(first_name) from employees;
```

Result Grid

first_name	upper(first_name)
Lex	LEX
Alexander	ALEXANDER
Bruce	BRUCE
David	DAVID
Valli	VALLI
Diana	DIANA
Nancy	NANCY
Daniel	DANIEL
John	JOHN

Result 19

Output

Action Output

#	Time	Action	Message	Duration / Fetch
43	10:55:47	select employee_id,substring_index(email,'@',2)from employees LIMIT 0, 5000	40 row(s) returned	0.000 sec / 0.000 sec
44	10:58:40	select first_name ,upper(first_name)from employees LIMIT 0, 5000	40 row(s) returned	0.000 sec / 0.000 sec
45	10:58:53	select first_name ,upper(first_name)from employees LIMIT 0, 5000	40 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

18-09-2023

9. Write a query to extract the last 4 character of phone numbers.

Code.

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

```
3 select employee_id,last_name,email from employees where email is null;
4 use cdac;
5 select phone_number,substring_index(phone_number,'.',-1) from employees;
6
7
```

The results are displayed in a table with two columns: `phone_number` and `substring_index(phone_number,'.',-1)`. The table contains 10 rows of data.

phone_number	substring_index(phone_number,'.',-1)
515.123.4567	4567
515.123.4568	4568
515.123.4569	4569
590.423.4567	4567
590.423.4568	4568
590.423.4569	4569
590.423.4560	4560
590.423.5567	5567
515.124.4569	4569
515.124.4560	4560

The Action Output pane at the bottom shows the execution of three queries:

#	Time	Action	Message	Duration / Fetch
45	10:58:53	select first_name,upperfirst_name() from employees LIMIT 0,5000	40 row(s) returned	0.000 sec / 0.000 sec
46	11:02:40	select phone_number,substring_index(phone_number,'.',-1) from employees LIMIT 0,5000	40 row(s) returned	0.000 sec / 0.000 sec
47	11:03:02	select phone_number,substring_index(phone_number,'.',-1) from employees LIMIT 0,50...	40 row(s) returned	0.000 sec / 0.000 sec

10. Write a query to get the last word of the street address.

MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

MANAGEMENT

- Server Status
- Client Connections
- Users and Privileges
- Status and System Variables
- Data Export
- Data Import/Restore

INSTANCE

- Startup / Shutdown
- Server Log
- Options File

PERFORMANCE

- Dashboard
- Performance Reports
- Administration
- Schemas

Information

No object selected

lab 18-09-2023

Limit to 5000 rows

```
2 * select * from employees;
3 * select employee_id, last_name, email from employees where email is null;
4 * use cdac;
5 * select * from locations;
6 * select street_address, substring_index(street_address, ',', -2) from locations;
```

Result Grid

street_address	substring_index(street_address, ',', -2)
2014 Jabberwocky Rd	Jabberwocky Rd
2011 Interiors Blvd	Interiors Blvd
2004 Charade Rd	Charade Rd
147 Spadina Ave	Spadina Ave
8204 Arthur St	Arthur St
Magdalen Centre, The Oxford Science Park	Science Park
Schwanthalerstr. 7031	Schwanthalerstr. 7031

Result 62 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
72	11:26:45	select job_id (pad(min_salary,5,0)) (pad(max_salary,5,0)) from jobs LIMIT 0, 5000	19 row(s) returned	0.000 sec / 0.000 sec
73	11:27:15	select job_id (pad(min_salary,5,0000)) (pad(max_salary,5,00000)) from jobs LIMIT 0, 5000	19 row(s) returned	0.000 sec / 0.000 sec
74	11:28:52	select street_address, substring_index(street_address, ',', -2) from locations LIMIT 0, 5000	7 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

ENG IN 11:29 18-09-2023