

1-Explore unique job titles:

COMMAND:  
SELECT DISTINCT job\_title  
FROM employees;

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

```
18 ("INS935", "unavailable"),
19 ("INS943", "unavailable"),
20 ("INS332", "unavailable"),
21 ("INS433", "unavailable");*/
22 SELECT DISTINCT job_title
23 FROM employees;
24
25
26
```

The Results window displays the output of the query, showing a list of unique job titles:

job_title
Manager
Analyst
HR
Lawyer
Accountant
Intern
Sales Representative

The Action Output window shows the execution log, including the query execution and the number of rows returned.

2-Name the top three youngest employees

COMMAND: SELECT \*  
FROM employees  
ORDER BY date\_of\_birth DESC  
LIMIT 3;

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

```
19 ("INS943", "unavailable"),
20 ("INS332", "unavailable"),
21 ("INS433", "unavailable");*/
22 /*SELECT DISTINCT job_title
23 FROM employees;*/
24 SELECT *
25 FROM employees
26 ORDER BY date_of_birth DESC
27 LIMIT 3;
```

The Results window displays the output of the query, showing the top three youngest employees:

Person_ID	First_Name	Last_Name	age	job_title	date_of_birth	phone_number	insurance_id	email
13	Anderson	Lisa	22	Intern	1999-03-10	5556667777	INS332	unavailable
20	Anderson	Lisa	22	Intern	1999-03-10	5556667777	INS332	unavailable
6	Anderson	Lisa	22	Intern	1999-03-10	5556667777	INS332	unavailable

The Action Output window shows the execution log, including the query execution and the number of rows returned.

3-Update date of birth for Alex Thompson as it is 1992-06-24

```
COMMAND: UPDATE employees
SET date_of_birth = '1992-06-24'
WHERE first_name = 'Alex' AND last_name = 'Thompson';
```

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

```
22 /*SELECT DISTINCT job_title
23 FROM employees;*/
24
25 /*SELECT *
26 FROM employees
27 ORDER BY date_of_birth DESC
28 LIMIT 3;*/
29
30 UPDATE employees
31 SET date_of_birth = '1992-06-24'
32 WHERE first_name = 'Alex' AND last_name = 'Thompson';
```

The Results grid displays the following data:

Person_ID	First_Name	Last_Name	Age	Job_Title	Date_of_Birth	Phone_Number	Insurance_ID	Email
1	Smith	John	32	Manager	1989-05-12	5551234567	INS736	unavailable
2	Johnson	Sarah	28	Analyst	1993-09-20	5559876543	INS832	unavailable
3	Davis	David	45	HR	1976-02-03	5550555995	INS007	unavailable
4	Brown	Emily	37	Lawyer	1984-11-15	5551112022	INS035	unavailable
5	Wilson	Michael	41	Accountant	1980-07-28	5554403003	INS943	unavailable
6	Anderson	Lisa	22	Intern	1999-03-10	5556667777	INS332	unavailable
7	Thompson	Alex	29	Sales Representative	1955-02-11	-10332	INS433	unavailable
8	Smith	John	32	Manager	1989-05-12	5551234567	INS736	unavailable
9	Johnson	Sarah	28	Analyst	1993-09-20	5559876543	INS832	unavailable
10	Davis	David	45	HR	1976-02-03	5550555995	INS007	unavailable

The Output tab shows the execution log:

#	Time	Action	Message	Duration / Fetch
31	16:49:46	select * from employees LIMIT 0, 1000	70 row(s) returned	0.000 sec / 0.000 sec
32	16:49:46	SET SQL_SAFE_UPDATES = 0	0 row(s) affected	0.000 sec
33	16:50:46	show databases	5 row(s) returned	0.016 sec / 0.000 sec
34	16:50:46	use unidatabase	0 row(s) affected	0.000 sec
35	16:50:46	select * from employees LIMIT 0, 1000	70 row(s) returned	0.000 sec / 0.000 sec
36	16:50:47	UPDATE employees SET date_of_birth = '1992-06-24' WHERE first_name = 'Alex' AND last_name = 'Thompson'	0 row(s) affected Rows matched: 0 Changed: 0 Warnings: 0	0.000 sec

4-Delete the data of employees with age greater than 30

```
COMMAND:
DELETE FROM employees
WHERE age > 30;
```

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

```
24 /*SELECT *
25 FROM employees
26 ORDER BY date_of_birth DESC
27 LIMIT 3;*/
28
29 /*UPDATE employees
30 SET date_of_birth = '1992-06-24'
31 WHERE first_name = 'Alex' AND last_name = 'Thompson';*/
32
33 DELETE FROM employees
34 WHERE age > 30;
```

The Results grid displays the following data:

Person_ID	First_Name	Last_Name	Age	Job_Title	Date_of_Birth	Phone_Number	Insurance_ID	Email
2	Johnson	Sarah	28	Analyst	1993-09-20	5559876543	INS832	unavailable
6	Anderson	Lisa	22	Intern	1999-03-10	5556667777	INS332	unavailable
7	Thompson	Alex	29	Sales Representative	1955-02-11	-10332	INS433	unavailable
9	Johnson	Sarah	28	Analyst	1993-09-20	5559876543	INS832	unavailable
13	Anderson	Lisa	22	Intern	1999-03-10	5556667777	INS332	unavailable
14	Thompson	Alex	29	Sales Representative	1955-02-11	-10332	INS433	unavailable
16	Johnson	Sarah	28	Analyst	1993-09-20	5559876543	INS832	unavailable
20	Anderson	Lisa	22	Intern	1999-03-10	5556667777	INS332	unavailable
21	Thompson	Alex	29	Sales Representative	1955-02-11	-10332	INS433	unavailable
23	Johnson	Sarah	28	Analyst	1993-09-20	5559876543	INS832	unavailable

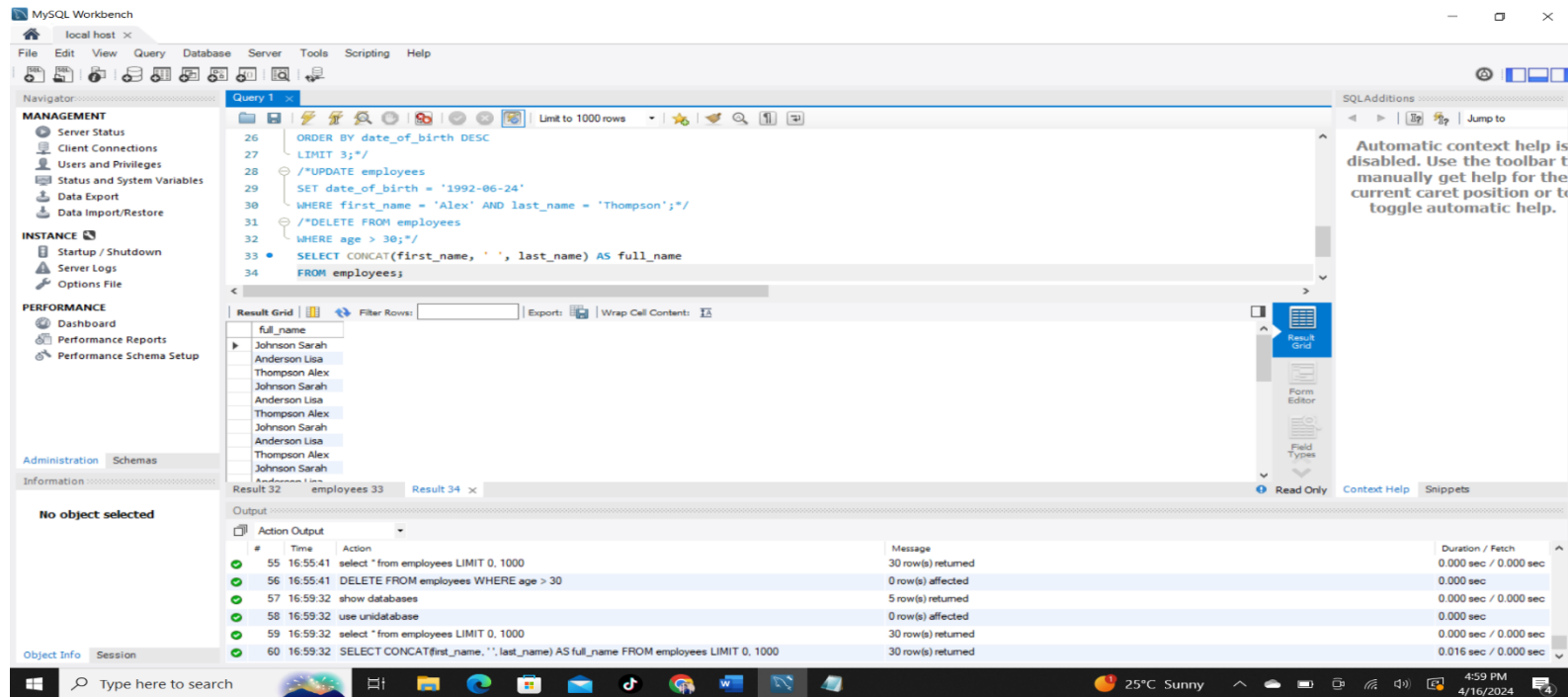
The Output tab shows the execution log:

#	Time	Action	Message	Duration / Fetch
51	16:55:03	select * from employees LIMIT 0, 1000	70 row(s) returned	0.000 sec / 0.000 sec
52	16:55:03	DELETE FROM employees WHERE age > 30	40 row(s) affected	0.016 sec
53	16:55:41	show databases	5 row(s) returned	0.000 sec / 0.000 sec
54	16:55:41	use unidatabase	0 row(s) affected	0.000 sec
55	16:55:41	select * from employees LIMIT 0, 1000	30 row(s) returned	0.000 sec / 0.000 sec
56	16:55:41	DELETE FROM employees WHERE age > 30	0 row(s) affected	0.000 sec

5-Concatenating First name and Last name:

COMMAND:

```
SELECT CONCAT(first_name, ' ', last_name) AS full_name
FROM employees;
```



MySQL Workbench interface showing a query execution. The query is:

```
26 ORDER BY date_of_birth DESC
27 LIMIT 3;*/
28 /*UPDATE employees
29 SET date_of_birth = '1992-06-24'
30 WHERE first_name = 'Alex' AND last_name = 'Thompson';*/
31 /*DELETE FROM employees
32 WHERE age > 30;*/
33 SELECT CONCAT(first_name, ' ', last_name) AS full_name
34 FROM employees;
```

The Result Grid shows the output of the query:

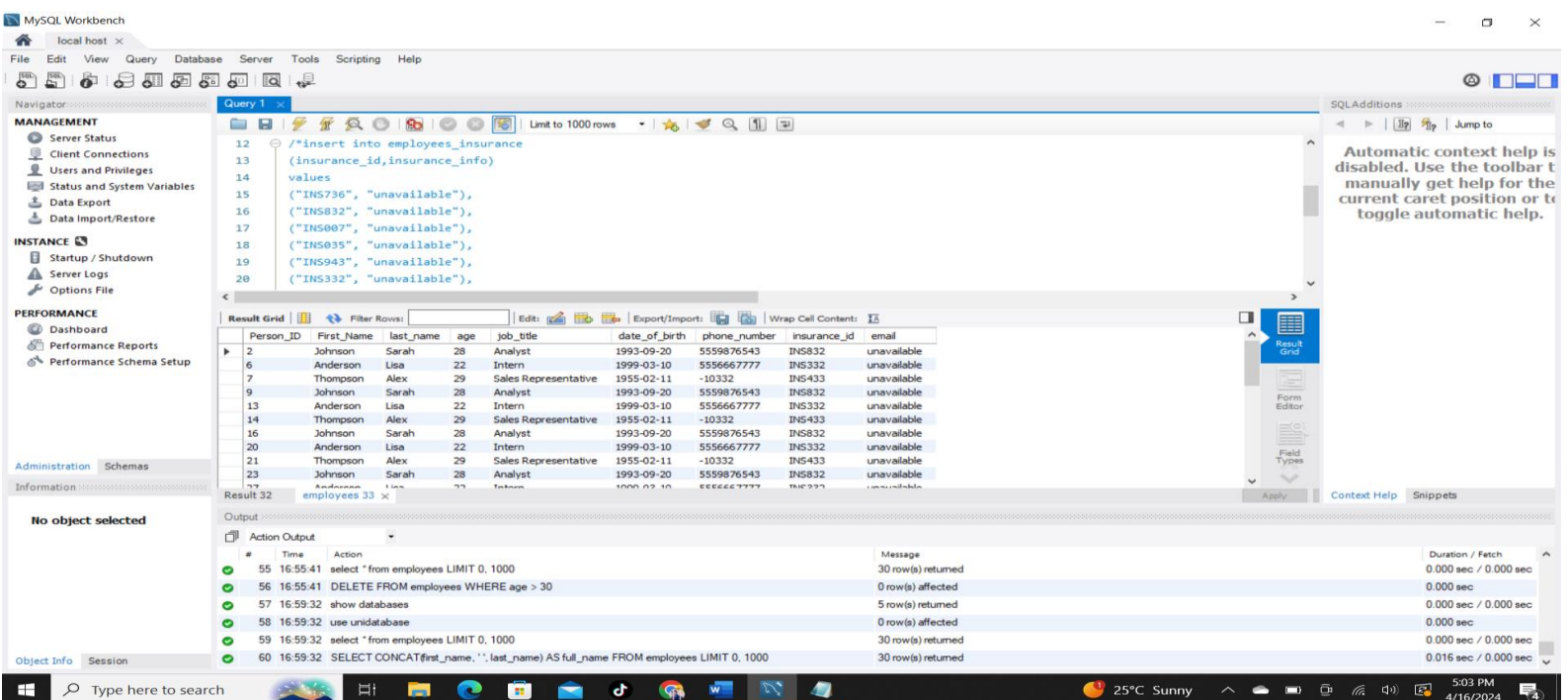
full_name
Johnson Sarah
Anderson Lisa
Thompson Alex
Johnson Sarah
Anderson Lisa
Thompson Alex
Johnson Sarah
Anderson Lisa
Thompson Alex
Johnson Sarah
Anderson Lisa
Thompson Alex

The Output pane shows the execution steps and their durations:

#	Time	Action	Message	Duration / Fetch
55	16:55:41	select * from employees LIMIT 0, 1000	30 row(s) returned	0.000 sec / 0.000 sec
56	16:55:41	DELETE FROM employees WHERE age > 30	0 row(s) affected	0.000 sec
57	16:59:32	show databases	5 row(s) returned	0.000 sec / 0.000 sec
58	16:59:32	use undatabase	0 row(s) affected	0.000 sec
59	16:59:32	select * from employees LIMIT 0, 1000	30 row(s) returned	0.000 sec / 0.000 sec
60	16:59:32	SELECT CONCAT(first_name, ' ', last_name) AS full_name FROM employees LIMIT 0, 1000	30 row(s) returned	0.016 sec / 0.000 sec

.Add a column called email to the employees table. Remember to set an appropriate datatype

.Add the value "unavailable" for all records in email in a SINGLE query



MySQL Workbench interface showing a query execution. The query is:

```
12 /*insert into employees_insurance
13 (insurance_id, insurance_info)
14 values
15 ("INS736", "unavailable"),
16 ("INS832", "unavailable"),
17 ("INS007", "unavailable"),
18 ("INS035", "unavailable"),
19 ("INS943", "unavailable"),
20 ("INS332", "unavailable");
```

The Result Grid shows the output of the query:

Person_ID	First_Name	Last_Name	age	job_title	date_of_birth	phone_number	insurance_id	email
6	Johnson	Sarah	28	Analyst	1993-09-20	5559876543	INS832	unavailable
7	Anderson	Lisa	22	Intern	1999-03-10	5556667777	INS332	unavailable
9	Thompson	Alex	29	Sales Representative	1955-02-11	-10332	INS433	unavailable
13	Johnson	Sarah	28	Analyst	1993-09-20	5559876543	INS832	unavailable
14	Anderson	Lisa	22	Intern	1999-03-10	5556667777	INS332	unavailable
16	Johnson	Sarah	28	Sales Representative	1955-02-11	-10332	INS433	unavailable
20	Johnson	Sarah	28	Analyst	1993-09-20	5559876543	INS832	unavailable
21	Anderson	Lisa	22	Intern	1999-03-10	5556667777	INS332	unavailable
23	Thompson	Alex	29	Sales Representative	1955-02-11	-10332	INS433	unavailable
27	Johnson	Sarah	28	Analyst	1993-09-20	5559876543	INS832	unavailable

The Output pane shows the execution steps and their durations:

#	Time	Action	Message	Duration / Fetch
55	16:55:41	select * from employees LIMIT 0, 1000	30 row(s) returned	0.000 sec / 0.000 sec
56	16:55:41	DELETE FROM employees WHERE age > 30	0 row(s) affected	0.000 sec
57	16:59:32	show databases	5 row(s) returned	0.000 sec / 0.000 sec
58	16:59:32	use undatabase	0 row(s) affected	0.000 sec
59	16:59:32	select * from employees LIMIT 0, 1000	30 row(s) returned	0.000 sec / 0.000 sec
60	16:59:32	SELECT CONCAT(first_name, ' ', last_name) AS full_name FROM employees LIMIT 0, 1000	30 row(s) returned	0.016 sec / 0.000 sec