

Assignment2

CSC 4710 Database System

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Part1 and Part3

The screenshot displays the SQL Server Enterprise Manager interface. The top pane shows a query window with the following SQL script:

```
use employees;
```

The bottom pane shows the output of the script, which includes a table with columns: #, Time, Action, Message, and Duration / Fetch. The output shows the execution of various SQL statements, including CREATE TABLE and CREATE OR REPLACE VIEW statements, and their respective durations.

#	Time	Action	Message	Duration / Fetch
6	03:12:15	/IS0503 set default_storage_engine = InnoDB /	0 row(s) affected	0.000 sec
7	03:12:15	/IS0503 select CONCAT(storage engine: ', @@default_storage_engine) as INFO '/	1 row(s) returned	0.000 sec / 0.000 sec
8	03:12:15	CREATE TABLE employees (emp_no INT NOT NULL, birth_date DATE NOT NULL, first_name...	0 row(s) affected	0.047 sec
9	03:12:15	CREATE TABLE departments (dept_no CHAR(4) NOT NULL, dept_name VARCHAR(40) NOT NULL, ...	0 row(s) affected	0.062 sec
10	03:12:16	CREATE TABLE dept_manager (emp_no INT NOT NULL, dept_no CHAR(4) NOT NULL, from_date...	0 row(s) affected	0.063 sec
11	03:12:16	CREATE TABLE dept_emp (emp_no INT NOT NULL, dept_no CHAR(4) NOT NULL, from_date...	0 row(s) affected	0.078 sec
12	03:12:16	CREATE TABLE titles (emp_no INT NOT NULL, title VARCHAR(50) NOT NULL, from_date DA...	0 row(s) affected	0.062 sec
13	03:12:16	CREATE TABLE salaries (emp_no INT NOT NULL, salary INT NOT NULL, from_date DAT...	0 row(s) affected	0.063 sec
14	03:12:16	CREATE OR REPLACE VIEW dept_emp_latest_date AS SELECT emp_no, MAX(from_date) AS from_date, MAX(to_dat...	0 row(s) affected	0.015 sec
15	03:12:16	CREATE OR REPLACE VIEW current_dept_emp AS SELECT emp_no, dept_no, from_date, to_date FROM dept...	0 row(s) affected	0.000 sec

Part2

1. employees

```
MySQL 8.0 Command Line Client
Enter password: *****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 22
Server version: 8.0.23 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show databases;
+-----+
| Database |
+-----+
| employees |
| information_schema |
| mysql |
| performance_schema |
| sakila |
| sys |
| world |
+-----+
7 rows in set (0.00 sec)

mysql>
```

2. 8 tables

```
MySQL 8.0 Command Line Client
+-----+
| NULL |
+-----+
1 row in set (0.00 sec)

mysql> use employees;
Database changed
mysql> select database();
+-----+
| database() |
+-----+
| employees |
+-----+
1 row in set (0.00 sec)

mysql> show tables;
+-----+
| Tables_in_employees |
+-----+
| current_dept_emp |
| departments |
| dept_emp |
| dept_emp_latest_date |
| dept_manager |
| employees |
| salaries |
| titles |
+-----+
8 rows in set (0.00 sec)

mysql>
```

3. "employees" are both schema and table name.

4. emp_no, birth_date, first_name, last_name, gender, hire_date

```
MySQL 8.0 Command Line Client
mysql> desc employees;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| emp_no | int | NO | PRI | NULL | |
| birth_date | date | NO | | NULL | |
| first_name | varchar(14) | NO | | NULL | |
| last_name | varchar(16) | NO | | NULL | |
| gender | enum('M','F') | NO | | NULL | |
| hire_date | date | NO | | NULL | |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql>
```

5. emp_no, dept_no, from_date, to_date

```
MySQL 8.0 Command Line Client
mysql> desc dept_manager;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| emp_no | int | NO | PRI | NULL | |
| dept_no | char(4) | NO | PRI | NULL | |
| from_date | date | NO | | NULL | |
| to_date | date | NO | | NULL | |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql>
```

6.

```
MySQL 8.0 Command Line Client
+-----+
| Tables_in_employees |
+-----+
| current_dept_emp     |
| departments           |
| dept_emp             |
| dept_emp_latest_date |
| dept_manager         |
| employees            |
| salaries             |
| titles               |
+-----+
8 rows in set (0.00 sec)

mysql> select * from departments limit 5;
+-----+
| dept_no | dept_name |
+-----+
| d009    | Customer Service |
| d005    | Development      |
| d002    | Finance          |
| d003    | Human Resources  |
| d001    | Marketing        |
+-----+
5 rows in set (0.00 sec)

mysql>
```

7. No. the employee table does not hold SSN number of the employees

Desc employees;

1 desc employees;

Field	Type	Null	Key	Default	Extra
emp_no	int	NO	PRI	NULL	
birth_date	date	NO		NULL	
first_name	varchar(14)	NO		NULL	
last_name	varchar(16)	NO		NULL	
gender	enum('M','F')	NO		NULL	
hire_date	date	NO		NULL	

8.

Select *

FROM employees

INNER JOIN salaries ON employees.emp_no= salaries.emp_no where salary> 100000;

Query 1 x employees

SQLAdditions: Jump to

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

```

1 • Select *
2 FROM employees
3 INNER JOIN salaries ON employees.emp_no= salaries.emp_no where salary> 100000;

```

Result Grid

emp_no	birth_date	first_name	last_name	gender	hire_date	emp_no	salary	from_date	to_date
10066	1952-11-13	Kwee	Schusler	M	1986-02-26	10066	102425	2000-02-23	2001-02-22
10066	1952-11-13	Kwee	Schusler	M	1986-02-26	10066	102674	2001-02-22	2002-02-22
10066	1952-11-13	Kwee	Schusler	M	1986-02-26	10066	103672	2002-02-22	9999-01-01
10068	1962-11-26	Charlene	Brattka	M	1987-08-07	10068	100005	1993-08-05	1994-08-05
10068	1962-11-26	Charlene	Brattka	M	1987-08-07	10068	101829	1994-08-05	1995-08-05
10068	1962-11-26	Charlene	Brattka	M	1987-08-07	10068	101630	1995-08-05	1996-08-04
10068	1962-11-26	Charlene	Brattka	M	1987-08-07	10068	105533	1996-08-04	1997-08-04
10068	1962-11-26	Charlene	Brattka	M	1987-08-07	10068	106204	1997-08-04	1998-08-04
10068	1962-11-26	Charlene	Brattka	M	1987-08-07	10068	108345	1998-08-04	1999-08-04
10068	1962-11-26	Charlene	Brattka	M	1987-08-07	10068	111623	1999-08-04	2000-08-03
10068	1962-11-26	Charlene	Brattka	M	1987-08-07	10068	112470	2000-08-03	2001-08-03
10068	1962-11-26	Charlene	Brattka	M	1987-08-07	10068	113229	2001-08-03	9999-01-01
10087	1959-07-23	Xinglin	Eugenio	F	1986-09-08	10087	102651	2000-05-07	2001-01-09
10107	1956-06-13	Dung	Baca	F	1994-03-22	10107	101676	2002-03-29	9999-01-01
10136	1961-09-14	Zissis	Pintelas	M	1986-02-11	10136	100320	1996-06-11	1997-06-11
10136	1961-09-14	Zissis	Pintelas	M	1986-02-11	10136	104248	1997-06-11	1998-06-11
10136	1961-09-14	Zissis	Pintelas	M	1986-02-11	10136	104909	1998-06-11	1999-06-11
10136	1961-09-14	Zissis	Pintelas	M	1986-02-11	10136	105565	1999-06-11	1999-09-20
10150	1955-01-29	Zhenbing	Perng	F	1986-11-16	10150	100182	2001-11-12	9999-01-01
10151	1959-03-06	Itzhak	Lichtner	M	1990-04-10	10151	101395	1997-12-11	1998-12-11
10151	1959-03-06	Itzhak	Lichtner	M	1990-04-10	10151	103978	1998-12-11	1999-12-11
10151	1959-03-06	Itzhak	Lichtner	M	1990-04-10	10151	107356	1999-12-11	2000-12-10
10151	1959-03-06	Itzhak	Lichtner	M	1990-04-10	10151	107956	2000-12-10	2001-12-10

Result 15 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	02:15:21	Select * FROM employees INNER JOIN salaries ON employees.emp_no= salaries.e...	94696 row(s) returned	0.000 sec / 1.578 sec

9.

Select *

FROM employees

INNER JOIN salaries ON employees.emp_no= salaries.emp_no where salary <= 30000;

Query 1 x employees

Don't Limit

```

1 select *
2 from employees
3 inner join salaries on employees.emp_no = salaries.emp_no where salary <= 30000;
4

```

SQL Additions: < > | ? | Jump to

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid | Filter Rows: | Export: | Wrap Cell Contents: |

emp_no	birth_date	first_name	last_name	gender	hire_date	emp_no	salary	from_date	to_date
--------	------------	------------	-----------	--------	-----------	--------	--------	-----------	---------

Result Grid
Form Editor
Field Types
Query Stats
Execution Plan

Result 18 x Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	02:20:10	Select * FROM employees INNER JOIN salaries ON employees.emp_no = salaries.e...	0 row(s) returned	1.531 sec / 0.000 sec
2	02:20:22	Select * FROM employees INNER JOIN salaries ON employees.emp_no = salaries.e...	0 row(s) returned	1.531 sec / 0.000 sec

10.

select e.*, s.salary, d.dept_no

from salaries s, dept_emp d, employees e

where s.salary > 30000 and d.dept_no = "d002" and s.emp_no = d.emp_no

and e.emp_no = s.emp_no;

Query 1: employees

```

1 select e.*, s.salary, d.dept_no
2 from salaries s, dept_emp d, employees e
3 where s.salary > 30000 and d.dept_no = "d002" and s.emp_no = d.emp_no
4 and e.emp_no = s.emp_no;

```

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

emp_no	birth_date	first_name	last_name	gender	hire_date	salary	dept_no
10042	1956-02-26	Magy	Stamatiou	F	1993-03-21	81662	d002
10042	1956-02-26	Magy	Stamatiou	F	1993-03-21	84183	d002
10042	1956-02-26	Magy	Stamatiou	F	1993-03-21	84389	d002
10042	1956-02-26	Magy	Stamatiou	F	1993-03-21	85501	d002
10042	1956-02-26	Magy	Stamatiou	F	1993-03-21	89833	d002
10042	1956-02-26	Magy	Stamatiou	F	1993-03-21	91161	d002
10042	1956-02-26	Magy	Stamatiou	F	1993-03-21	95035	d002
10042	1956-02-26	Magy	Stamatiou	F	1993-03-21	94868	d002
10050	1958-05-21	Yinghua	Dredge	M	1990-12-25	74366	d002
10050	1958-05-21	Yinghua	Dredge	M	1990-12-25	78675	d002
10050	1958-05-21	Yinghua	Dredge	M	1990-12-25	82220	d002
10050	1958-05-21	Yinghua	Dredge	M	1990-12-25	86604	d002
10050	1958-05-21	Yinghua	Dredge	M	1990-12-25	88087	d002
10050	1958-05-21	Yinghua	Dredge	M	1990-12-25	88836	d002
10050	1958-05-21	Yinghua	Dredge	M	1990-12-25	90623	d002
10050	1958-05-21	Yinghua	Dredge	M	1990-12-25	91530	d002
10050	1958-05-21	Yinghua	Dredge	M	1990-12-25	93689	d002
10050	1958-05-21	Yinghua	Dredge	M	1990-12-25	97571	d002
10050	1958-05-21	Yinghua	Dredge	M	1990-12-25	97817	d002
10050	1958-05-21	Yinghua	Dredge	M	1990-12-25	97830	d002
10059	1953-09-19	Alejandro	McAlpine	F	1991-06-26	71218	d002
10059	1953-09-19	Alejandro	McAlpine	F	1991-06-26	73299	d002
10059	1953-09-19	Alejandro	McAlpine	F	1991-06-26	76448	d002

Result 42 x

Output

#	Time	Action	Message	Duration / Fetch
1	03:29:25	select e.*, s.salary, d.dept_no from salaries s, dept_emp d, employees e ...	165285 row(s) returned	0.000 sec / 0.406 sec

11

select e.*, s.salary, d.dept_no

from salaries s, dept_emp d, employees e

where s.salary > 30000 and d.dept_no = "d002" and s.emp_no = d.emp_no

and e.emp_no = s.emp_no in

(select e.emp_no

from employees e, dept_manager m

where e.emp_no = m.emp_no and e.last_name = "John");

Query 1: employees

```
1 select e.*, s.salary, d.dept_no
2 from salaries s, dept_emp d, employees e
3 where s.salary > 30000 and d.dept_no = "d002" and s.emp_no = d.emp_no
4 and e.emp_no = s.emp_no in
5 (select e.emp_no
6 from employees e, dept_manager m
7 where e.emp_no = m.emp_no and e.last_name = "John");
8
```

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid

emp_no	birth_date	first_name	last_name	gender	hire_date	salary	dept_no
--------	------------	------------	-----------	--------	-----------	--------	---------

Result: 56 x

Output

#	Time	Action	Message	Duration / Fetch
1	04:02:20	select e.*, s.salary, d.dept_no from salaries s, dept_emp d, ...	0 row(s) returned	0.265 sec / 0.000 sec

12

select e.*, s.salary

from salaries s, dept_manager m, employees e

where s.salary <= 30000 and e.emp_no = m.emp_no and s.emp_no = m.emp_no;

Query 1 x employees

SQL Additions: Jump to

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

```

1 select e.*, s.salary
2 from salaries s, dept_manager m, employees e
3 where s.salary <= 30000 and e.emp_no = m.emp_no and s.emp_no = m.emp_no;
4
5

```

Result Grid

emp_no	birth_date	first_name	last_name	gender	hire_date	salary
--------	------------	------------	-----------	--------	-----------	--------

Filter Rows: Export: Wrap Cell Content: TA

Result Grid
Form Editor
Field Types
Query Stats
Execution Plan

Result 58 x Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	04:02:20	select e.*, s.salary, d.dept_no from salaries s, dept_emp d, ...	0 row(s) returned	0.265 sec / 0.000 sec
2	04:04:34	select e.*, s.salary from salaries s, dept_manager m, employ...	0 row(s) returned	0.000 sec / 0.000 sec
3	04:05:05	select e.*, s.salary from salaries s, dept_manager m, employ...	0 row(s) returned	0.000 sec / 0.000 sec

13.

select e.first_name, e.last_name, s.salary

from salaries s, dept_manager m, employees e

where s.salary > 50000 and e.emp_no = m.emp_no and s.emp_no = m.emp_no;

Query 1 x employees

SQL Additions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

```

1 • select e.first_name, e.last_name, s.salary
2   from salaries s, dept_manager m, employees e
3  where s.salary > 50000 and e.emp_no = m.emp_no and s.emp_no = m.emp_no;
4
5
6
7

```

Result Grid

first_name	last_name	salary
Rutger	Hofmeyr	50072
Karsten	Sigstam	50122
Leon	DasSama	50276
Shirish	Ossenbr...	50319
Rosine	Cools	50365
Krassimir	Wegerle	50390
Sanjoy	Quadeer	50457
Yuchang	Weedman	50555
Oscar	Ghazale	50868
Rosine	Cools	50953
Shirish	Ossenbr...	51298
Shem	Kieras	51381
Karsten	Sigstam	51472
Shirish	Ossenbr...	51622
DeForest	Hagimont	51690
Hilary	Kambil	51718
Tonny	Butterworth	51810
Yuchang	Weedman	51812
Marjo	Giarratana	51900
Yuchang	Weedman	52051
Isamu	Legleitner	52070
Marjo	Giarratana	52121
DeForest	Hagimont	52342

Result 65 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	04:10:20	select e.first_name, e.last_name, s.salary from salaries s, de...	326 row(s) returned	0.000 sec / 0.000 sec

14.

select distinct e.first_name, e.last_name, s.salary, d.dept_no

from salaries s, dept_manager m, employees e, dept_emp d

where s.salary > 50000 and e.emp_no = m.emp_no and s.emp_no = m.emp_no and d.dept_no = "d002"

and d.dept_no = m.dept_no;

Query 1: employees

```
1 • select distinct e.first_name, e.last_name, s.salary, d.dept_no
2 from salaries s, dept_manager m, employees e, dept_emp d
3 where s.salary > 50000 and e.emp_no = m.emp_no and s.emp_no = m.emp_no and d.dept_no = "d002"
4 and d.dept_no = m.dept_no;
```

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid

first_name	last_name	salary	dept_no
Ebru	Alpin	60026	d002
Ebru	Alpin	61808	d002
Ebru	Alpin	62003	d002
Ebru	Alpin	64775	d002
Ebru	Alpin	65105	d002
Ebru	Alpin	66790	d002
Ebru	Alpin	67827	d002
Ebru	Alpin	68195	d002
Ebru	Alpin	70253	d002
Ebru	Alpin	72727	d002
Ebru	Alpin	72335	d002
Ebru	Alpin	75173	d002
Ebru	Alpin	79066	d002
Ebru	Alpin	79152	d002
Ebru	Alpin	83440	d002
Ebru	Alpin	85394	d002
Ebru	Alpin	88298	d002
Ebru	Alpin	88443	d002
Isamu	Legleitner	52070	d002
Isamu	Legleitner	55297	d002
Isamu	Legleitner	55767	d002
Isamu	Legleitner	58800	d002
Isamu	Legleitner	62669	d002

Result 68 x

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	04:24:55	select distinct e.first_name, e.last_name, s.salary, d.dept_n...	36 row(s) returned	0.360 sec / 0.000 sec

15.

300024 employees

select count(emp_no)

from employees;

The screenshot shows a SQL IDE interface. The top toolbar includes icons for file operations, execution, and a 'Don't Limit' dropdown. The query editor contains the following SQL code:

```
1 • select count(emp_no)
2   from employees;
3
4
5
6
7
```

The right sidebar contains a 'SQLAdditions' section with a message: 'Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.' Below this is a vertical toolbar with icons for 'Result Grid', 'Form Editor', 'Field Types', 'Query Stats', and 'Execution Plan'.

The bottom section displays the 'Result Grid' with the following data:

count(emp_no)
300024

Below the result grid is the 'Output' section, which shows the execution details in a table:

#	Time	Action	Message	Duration / Fetch
1	04:28:26	select count(emp_no) from employees	1 row(s) returned	0.125 sec / 0.000 sec

16.

```
select distinct e.first_name, e.last_name, s.salary
from employees e, salaries s
where e.emp_no = s.emp_no
order by s.salary desc;
```

Query 1 x employees

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

```

1 • select distinct e.first_name, e.last_name, s.salary
2   from employees e, salaries s
3  where e.emp_no = s.emp_no
4  order by s.salary desc;
5
6
7
8

```

Result Grid

first_name	last_name	salary
Tokuyasu	Pesch	158220
Tokuyasu	Pesch	157821
Honesty	Mukaidono	156286
Xiahua	Whitcomb	155709
Sanjai	Luders	155513
Tsutomu	Alameldin	155377
Tsutomu	Alameldin	155190
Tsutomu	Alameldin	154888
Tsutomu	Alameldin	154885
Willard	Baca	154459
Lidong	Meriste	154376
Sanjai	Luders	154227
Charmane	Grisvold	153715
Tokuyasu	Pesch	153458
Tokuyasu	Pesch	153166
Weijing	Chenoweth	152710
Weicheng	Hatcliff	152687
Honesty	Mukaidono	152576
Shin	Birdsall	152412
Mitsuyuki	Stanfel	152220
Lidong	Meriste	152208
Xiahua	Whitcomb	151929
Willard	Rara	151768

Result 73 x

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	04:39:01	select distinct e.first_name, e.last_name, s.salary from empl...	2841239 row(s) returned	26.454 sec / 1.515 sec

17.

```

select distinct e.first_name, e.last_name, d.dept_no, s.salary
from employees e, salaries s, dept_emp d
where e.emp_no = s.emp_no and d.emp_no = e.emp_no
order by d.dept_no asc, s.salary desc ;

```

Query 1 x employees

Don't Limit

```

1 select distinct e.first_name, e.last_name, d.dept_no, s.salary
2 from employees e, salaries s, dept_emp d
3 where e.emp_no = s.emp_no and d.emp_no = e.emp_no
4 order by d.dept_no asc, s.salary desc ;
5
6
7
8

```

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid

first_name	last_name	dept_no	salary
Akemi	Warwick	d001	145128
Ingmar	Isard	d001	143644
Akemi	Warwick	d001	143086
Ingmar	Isard	d001	142753
Ortrud	Diderrich	d001	142506
Chikako	Jiang	d001	142485
Clyde	Georgako...	d001	142181
Clyde	Georgako...	d001	141842
Sungwon	Vural	d001	140974
Ingmar	Isard	d001	140692
Clyde	Georgako...	d001	140542
Minghong	Siegrist	d001	140077
Akemi	Warwick	d001	139827
Ortrud	Diderrich	d001	139688
Chikako	Jiang	d001	139577
Minghong	Siegrist	d001	138842
Salvador	Luca	d001	138755
Mona	Carrere	d001	138637
Clyde	Georgako...	d001	138198
Ingmar	Isard	d001	138110
Moty	Pellegrinelli	d001	137413
Sungwon	Vural	d001	137342
Moty	Pellegrinelli	d001	136998

Result 74 x

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	04:39:01	select distinct e.first_name, e.last_name, s.salary from empl...	2841239 row(s) returned	26.454 sec / 1.515 sec
2	04:46:08	select distinct e.first_name, e.last_name, d.dept_no, s.salar...	3140916 row(s) returned	10.812 sec / 1.141 sec

18.

Bikash Covnot was the last person

select distinct e.first_name, e.last_name, e.hire_date

from employees e

order by e.hire_date desc limit 1 ;

Query 1 x employees

SQLAdditions:.....

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

```
1 select distinct e.first_name, e.last_name, e.hire_date
2 from employees e
3 order by e.hire_date desc limit 1 ;
4
5
```

Result Grid

first_name	last_name	hire_date
Bikash	Covnot	2000-01-28

employees 80 x

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	04:53:30	select distinct e.first_name, e.last_name, e.hire_date from e...	1 row(s) returned	0.516 sec / 0.000 sec

19. Arie Staelin was the first person

select distinct e.first_name, e.last_name, e.hire_date

from employees e

order by e.hire_date asc;

Query 1 x employees

SQLAdditions: Jump to

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

```

1 • select distinct e.first_name, e.last_name, e.hire_date
2   from employees e
3   order by e.hire_date asc
4
5

```

Result Grid

first_name	last_name	hire_date
Arie	Staelin	1985-01-01
DeForest	Hagimont	1985-01-01
Ebru	Alpin	1985-01-01
Krassimir	Wegerle	1985-01-01
Margareta	Markovitch	1985-01-01
Peternela	Onuegbe	1985-01-01
Przemyslaw	Kaelbling	1985-01-01
Shirish	Ossenbrun...	1985-01-01
Tonny	Butterworth	1985-01-01
Isamu	Legleitner	1985-01-14
Adil	Furedi	1985-02-01
Arvin	Birdsall	1985-02-01
Divier	Marrakchi	1985-02-01
Gian	Rothe	1985-02-01
Jaques	Kalefeld	1985-02-01
Jayesh	Minakawa	1985-02-01
Kannan	Mahnke	1985-02-01
Mona	Beutelspa...	1985-02-01
Poorav	Gecsei	1985-02-01
Shir	Munck	1985-02-01
Shounak	Selenyi	1985-02-01
Taizo	Orsini	1985-02-01
Yvonne	Pilenni	1985-02-01

employees 87 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	04:56:48	select distinct e.first_name, e.last_name, e.hire_date from e...	300017 row(s) returned	0.657 sec / 0.093 sec

20

Seven job titles

select count(distinct title)

from titles;

The screenshot shows a SQL IDE interface. The top toolbar includes icons for file operations, execution, and a 'Don't Limit' dropdown. The query editor contains the following SQL code:

```
1 • select count(distinct title)
2   from titles;
3
4
```

The right sidebar contains a 'SQLAdditions' section with a message: 'Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.'

The bottom section displays the 'Result Grid' with a single row of data:

count(distinct title)
7

Below the result grid, the 'Output' pane shows the execution details:

#	Time	Action	Message	Duration / Fetch
1	05:02:00	select count(distinct title) from titles	1 row(s) returned	0.203 sec / 0.000 sec

21.

Number of male employees: 179973

```
select count(distinct emp_no)
from employees
where employees.gender = "M";
```

The screenshot shows a SQL IDE interface. The top toolbar includes icons for file operations, query execution, and a 'Don't Limit' dropdown. The SQL editor contains the following query:

```
1 • select count(distinct emp_no)
2   from employees
3  where employees.gender = "M";
4
5
```

Below the editor, the 'Result Grid' shows the query results:

count(distinct emp_no)
179973

On the right side, a vertical toolbar contains icons for 'Result Grid', 'Form Editor', 'Field Types', 'Query Stats', and 'Execution Plan'. A message box on the right states: 'Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.'

At the bottom, the 'Output' pane shows the 'Action Output' for the query execution:

#	Time	Action	Message	Duration / Fetch
1	05:09:03	select count(distinct emp_no) from employees where emp...	1 row(s) returned	0.125 sec / 0.000 sec

22

Female: 40.0138%

Male: 59.9862%

select

(female_sum/total_sum * 100) as female_ratio,

(male_sum/total_sum * 100) as male_ratio

from

(select count(e.emp_no) as female_sum

```
from employees e  
where e.gender = "F"  
) as female_sum_result,
```

```
(select count(e.emp_no) as male_sum  
from employees e  
where e.gender = "M"  
) as male_sum_result,
```

```
(select count(e.emp_no) as total_sum  
from employees e  
) as total_sum_result;
```

Query: employees

```

1 select
2     (female_sum/total_sum * 100) as female_ratio,
3     (male_sum/total_sum * 100) as male_ratio
4 from
5     (select count(e.emp_no) as female_sum
6         from employees e
7         where e.gender = "F"
8     ) as female_sum_result,
9
10    (select count(e.emp_no) as male_sum
11        from employees e
12        where e.gender = "M"
13    ) as male_sum_result,
14
15    (select count(e.emp_no) as total_sum
16        from employees e
17    ) as total_sum_result;

```

SQLAdditions: Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid

female_ratio	male_ratio
40.0138	59.9862

Result 41: Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	23:28:51	select (female_sum/total_sum * 100) as female_ratio, (male_sum/total_sum * 100) as male_ratio	1 row(s) returned	3.422 sec / 0.000 sec
2	23:33:21	select (female_sum/total_sum * 100) as female_ratio, (male_sum/total_sum * 100) as male_ratio	1 row(s) returned	0.297 sec / 0.000 sec

23.

Female: 39.9785%

Male: 60.0215%

select

(female_sum/total_sum * 100) as female_ratio,

(male_sum/total_sum * 100) as male_ratio

from

(select sum(s.salary) as female_sum

```
from employees e inner join salaries s  
on e.emp_no = s.emp_no  
where e.gender = "F"  
) as female_sum_result,
```

```
(select sum(s.salary) as male_sum  
from employees e inner join salaries s  
on e.emp_no = s.emp_no  
where e.gender = "M"  
) as male_sum_result,
```

```
(select sum(s.salary) as total_sum  
from employees e inner join salaries s  
on e.emp_no = s.emp_no  
) as total_sum_result;
```

Query 1 employees

```

1 select
2   (female_sum/total_sum * 100) as female_ratio,
3   (male_sum/total_sum * 100) as male_ratio
4 from
5   (select sum(s.salary) as female_sum
6     from employees e inner join salaries s
7     on e.emp_no = s.emp_no
8     where e.gender = "F"
9   ) as female_sum_result,
10
11  (select sum(s.salary) as male_sum
12    from employees e inner join salaries s
13    on e.emp_no = s.emp_no
14    where e.gender = "M"
15  ) as male_sum_result,
16
17  (select sum(s.salary) as total_sum
18    from employees e inner join salaries s
19    on e.emp_no = s.emp_no
20  ) as total_sum_result;
21
22

```

SQLAdditions: Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid

female_ratio	male_ratio
39.9785	60.0215

Result 40

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	23:28:51	select (female_sum/total_sum * 100) as female_ratio, (male_sum/total_sum * 100) as male_ratio	1 row(s) returned	3.422 sec / 0.000 sec

24.

```

select e.emp_no, e.first_name, e.last_name, m.from_date
from employees e, dept_manager m
where e.emp_no = m.emp_no
order by m.from_date asc;

```

Query 1: employees

```

1 select e.emp_no, e.first_name, e.last_name, m.from_date
2 from employees e, dept_manager m
3 where e.emp_no = m.emp_no
4 order by m.from_date asc;
5
6
7

```

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

emp_no	first_name	last_name	from_date
110022	Margareta	Markovitch	1985-01-01
110085	Ebru	Alpin	1985-01-01
110183	Shirish	Ossenbrun...	1985-01-01
110303	Krassimir	Wegerle	1985-01-01
110511	DeForest	Hagimont	1985-01-01
110725	Peternela	Onuegbu	1985-01-01
111035	Przemyslaw	Kaelbling	1985-01-01
111400	Arie	Staelin	1985-01-01
111692	Tonny	Butterworth	1985-01-01
110344	Rosine	Cools	1988-09-09
111784	Marjo	Giarratana	1988-10-17
110765	Rutger	Hofmeyr	1989-05-06
110114	Isamu	Legleitner	1989-12-17
111133	Hauke	Zhang	1991-03-07
111534	Hilary	Kambil	1991-04-08
110800	Sanjoy	Quadeer	1991-09-12
110039	Vishwani	Minakawa	1991-10-01
110228	Karsten	Sigstam	1992-03-21
110567	Leon	DasSarma	1992-04-25
110386	Shem	Kieras	1992-08-02
111877	Xiaobin	Spinelli	1992-09-08
110854	Dung	Pesch	1994-06-28
111999	Yvonne	Weedman	1996-01-03

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

Read Only | Context Help | Snippets

Output

#	Time	Action	Message	Duration / Fetch
1	17:55:16	use employees	0 row(s) affected	0.000 sec
2	17:55:33	select count(distinct emp_no) from employees where employees gender = "M"	1 row(s) returned	0.172 sec / 0.000 sec
3	19:14:39	select e.emp_no, e.gender, s.salary from employees e inner join salaries s on e.emp_no...	Error Code: 1146. Table 'employees.salary' doesn't exist	0.000 sec
4	19:15:06	select e.emp_no, e.gender, s.salary from employees e inner join salaries s on e.emp_no...	1706321 row(s) returned	0.000 sec / 1.187 sec
5	19:29:03	select e.emp_no, e.first_name, e.last_name, m.from_date from employees e, dept_ma...	Error Code: 1054. Unknown column 'e.last_name' in field list	0.000 sec
6	19:29:12	select e.emp_no, e.first_name, e.last_name, m.from_date from employees e, dept_ma...	24 row(s) returned	0.000 sec / 0.000 sec
7	19:29:45	select e.emp_no, e.first_name, e.last_name, m.from_date from employees e, dept_ma...	24 row(s) returned	0.000 sec / 0.000 sec

25.

```

select d.dept_no, d.dept_name, e.emp_no, e.last_name
from employees e, dept_manager m, departments d
where d.dept_no = m.dept_no and m.emp_no = e.emp_no
order by d.dept_no asc;

```


Query 1 x employees

SQL Additions: Jump to

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

```

1 select d.dept_no, d.dept_name, e.emp_no, e.last_name
2 from employees e, dept_manager m, departments d
3 where d.dept_no = m.dept_no and m.emp_no = e.emp_no
4 order by d.dept_no asc;
5
6
7

```

Result Grid

dept_no	dept_name	emp_no	last_name
d001	Marketing	110022	Markovitch
d001	Marketing	110039	Minakawa
d002	Finance	110085	Alpin
d002	Finance	110114	Legleitner
d003	Human Resources	110183	Ossenbrun...
d003	Human Resources	110228	Sigstam
d004	Production	110303	Wegerle
d004	Production	110344	Cools
d004	Production	110386	Kieras
d004	Production	110420	Ghazale
d005	Development	110511	Hagimont
d005	Development	110567	DasSarma
d006	Quality Managem...	110725	Onuegbe
d006	Quality Managem...	110765	Hofmeyr
d006	Quality Managem...	110800	Quadeer
d006	Quality Managem...	110854	Pesch
d007	Sales	111035	Kaelbling
d007	Sales	111133	Zhang
d008	Research	111400	Staelin
d008	Research	111534	Kambil
d009	Customer Service	111692	Butterworth
d009	Customer Service	111784	Giarratana
d009	Customer Service	111877	Spinelli
d009	Customer Service	111939	Weedman

Result 7 x

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	19:42:15	select d.dept_no, d.dept_name, e.emp_no, e.last_name from employees e, dept_man...	24 row(s) returned	0.000 sec / 0.000 sec

26.

```

select de.dept_no, e.emp_no, e.last_name
from employees e left outer join dept_emp de
on e.emp_no = de.emp_no
where de.dept_no = null;

```

The screenshot shows the SQL Developer interface. The main window displays a query titled 'employees' with the following SQL code:

```
1 select de.dept_no, e.emp_no, e.last_name
2 from employees e left outer join dept_emp de
3 on e.emp_no = de.emp_no
4 where de.dept_no = null;
```

The query is executed, and the results are displayed in the 'Result Grid' pane. The grid shows three columns: 'dept_no', 'emp_no', and 'last_name'. The results are empty, indicating that no rows were returned for the specified criteria.

On the right side, the 'SQLAdditions' pane displays a message: 'Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.'

At the bottom, the 'Output' pane shows the execution log with two entries:

#	Time	Action	Message	Duration / Fetch
1	20:31:15	select e.emp_no, e.last_name, m.dept_no from employees e left outer join dept_man...	0 row(s) returned	0.000 sec / 0.000 sec
2	20:32:14	select de.dept_no, e.emp_no, e.last_name from employees e left outer join dept_emp...	0 row(s) returned	0.000 sec / 0.000 sec

27.

```
select de.dept_no, e.emp_no, e.last_name

from employees e left outer join dept_emp de

on e.emp_no = de.emp_no

where de.dept_no = null;
```

Query 1 employees

```

1 select de.dept_no, e.emp_no, e.last_name
2 from employees e left outer join dept_emp de
3 on e.emp_no = de.emp_no
4 where de.dept_no = null;
5
6
7
8
9
10
11

```

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid | Filter Rows: | Exports: | Wrap Cell Content: |

dept_no emp_no last_name

Result 14 x

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	20:31:15	select e.emp_no, e.last_name, m.dept_no from employees e left outer join dept_man...	0 row(s) returned	0.000 sec / 0.000 sec
2	20:32:14	select de.dept_no, e.emp_no, e.last_name from employees e left outer join dept_emp...	0 row(s) returned	0.000 sec / 0.000 sec

28.

```

select e.emp_no, e.last_name, m.dept_no
from employees e left outer join dept_manager m
on e.emp_no = m.emp_no
where m.dept_no = null;

```

The screenshot shows the SQL Developer interface. The top pane contains a query named 'employees' with the following SQL code:

```
1 select e.emp_no, e.last_name, m.dept_no
2 from employees e left outer join dept_manager m
3 on e.emp_no = m.emp_no
4 where m.dept_no = null;
5
6
7
8
9
10
```

The bottom pane shows the 'Result Grid' with the following columns: emp_no, last_name, dept_no. The grid is currently empty.

The right pane shows a message: 'Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.'

The bottom status bar shows 'Result 13 x' and 'Read Only Context Help Snippets'.

The bottom output pane shows the following message:

#	Time	Action	Message	Duration / Fetch
1	20:31:15	select e.emp_no, e.last_name, m.dept_no from employees e left outer join dept_man...	0 row(s) returned	0.000 sec / 0.000 sec

29.

17346 employees

select count(de.emp_no)

from dept_emp de

where de.dept_no = "d002";

Query 1 x employees

SQL Additions: < > | Jump to

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

```

1 • select count(de.emp_no)
2   from dept_emp de
3  where de.dept_no = "d002";
4
5
6
7
8
9
10
11
12

```

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

count(de.emp_no)
17346

Result Grid | Form Editor | Field Types | Query Stats | Execution Plan

Result 15 x | Read Only | Context Help | Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	20:31:15	select e.emp_no, e.last_name, m.dept_no from employees e left outer join dept_man...	0 row(s) returned	0.000 sec / 0.000 sec
2	20:32:14	select de.dept_no, e.emp_no, e.last_name from employees e left outer join dept_emp...	0 row(s) returned	0.000 sec / 0.000 sec
3	20:36:29	select count(de.emp_no) from dept_emp de where de.dept_no = "d002"	1 row(s) returned	0.015 sec / 0.000 sec

30.

Customer Service
 Development
 Finance
 Human Resources
 Marketing
 Production
 Quality Management
 Research
 Sales

select distinct d.dept_name

from departments d;

The screenshot shows the SQL Developer interface. The top pane displays a query: `select distinct d.dept_name from departments d;`. The bottom pane shows the 'Result Grid' with a list of department names: Customer Service, Development, Finance, Human Resources, Marketing, Production (selected), Quality Management, Research, and Sales. The 'Output' pane at the bottom shows the execution log with four actions, all successful, returning 0, 0, 1, and 9 rows respectively.

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

#	Time	Action	Message	Duration / Fetch
1	20:31:15	select e.emp_no, e.last_name, m.dept_no from employees e left outer join dept_man...	0 row(s) returned	0.000 sec / 0.000 sec
2	20:32:14	select de.dept_no, e.emp_no, e.last_name from employees e left outer join dept_emp...	0 row(s) returned	0.000 sec / 0.000 sec
3	20:36:29	select count(de.emp_no) from dept_emp de where de.dept_no = "d002"	1 row(s) returned	0.015 sec / 0.000 sec
4	20:39:01	select distinct d.dept_name from departments d	9 row(s) returned	0.000 sec / 0.000 sec

31

Supot	Remmele	1952-02-01
Kiyokazu	Whitcomb	1952-02-01
Eishiro	Kuzuoka	1952-02-01
Ronghao	Schaad	1952-02-01

Moni Decaestecker 1952-02-01
Jouni Pocchiola 1952-02-01

```
select e.first_name, e.last_name, e.birth_date  
from employees e  
order by e.birth_date asc;
```

The screenshot displays the SQL Developer interface. The top pane shows a query named 'Query 1' with the following SQL code:

```
1 • select e.first_name, e.last_name, e.birth_date  
2 from employees e  
3 order by e.birth_date asc;  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13
```

The bottom pane shows the 'Result Grid' with the following data:

first_name	last_name	birth_date
Supot	Remmele	1952-02-01
Kiyokazu	Whitcomb	1952-02-01
Eishiro	Kuzuoka	1952-02-01
Ronghao	Schaad	1952-02-01
Moni	Decaeste...	1952-02-01
Jouni	Pocchiola	1952-02-01
Shahid	Swan	1952-02-02
True	Denny	1952-02-02
Armond	Frijda	1952-02-02
Janalee	Perri	1952-02-02
Jianwen	Sigstam	1952-02-02
Rayond	Slutz	1952-02-02
Fan	Przulj	1952-02-02
Kristof	Ranft	1952-02-02
Bader	Mapelli	1952-02-02
Moto	Staudham...	1952-02-02
Hyuckchul	Loncour	1952-02-02
Juyoung	Seghrouchni	1952-02-02
Mayuko	Pardalos	1952-02-02
Sugwroo	Kohling	1952-02-02
Rasiah	Sudkamp	1952-02-02
Ayakannu	Assaf	1952-02-02
Winni	Miara	1952-02-02

The right sidebar contains a 'Context Help' panel with the message: 'Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.'

The bottom status bar shows the output of the query: '1 20:46:53 select e.first_name, e.last_name, e.birth_date from employees e order by e.birth_date ... 300024 row(s) returned 0.218 sec / 0.047 sec'.

32.

There are a lot of same the oldest employees

```
select e.first_name, e.last_name, e.birth_date
```

```
from employees e
```

```
order by e.birth_date desc;
```

The screenshot displays the SQL Developer interface. The top pane shows a query named 'Query 1' with the following SQL code:

```
1 select e.first_name, e.last_name, e.birth_date
2 from employees e
3 order by e.birth_date desc;
4
5
6
7
8
9
10
11
12
13
```

The right pane shows a message: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

The bottom pane shows the 'Result Grid' with the following data:

first_name	last_name	birth_date
Nigel	Zirintsis	1965-02-01
Hirochika	Goldhammer	1965-02-01
Jackson	Zielinski	1965-02-01
Zhiguo	Staudham...	1965-02-01
Hinrich	Perin	1965-02-01
Jaana	Milica	1965-02-01
Snehasis	Muhlberg	1965-02-01
Mizuhiro	Kobara	1965-02-01
Wuxiu	Poupard	1965-02-01
Kazunori	Perz	1965-02-01
Henk	Anger	1965-02-01
Badri	Schapiro	1965-02-01
Chiranjit	Dredge	1965-02-01
Berni	Stranks	1965-02-01
Adamantios	Vanwelke...	1965-02-01
Mario	Cochrane	1965-02-01
Shay	Servieres	1965-02-01
Nevio	Thisen	1965-02-01
Zhonghua	Snyers	1965-02-01
Armond	Perly	1965-02-01
Gopalakri...	Angel	1965-02-01
Magdalena	Penn	1965-02-01
Arie	Couillard	1965-02-01

The bottom pane shows the 'Output' window with the following messages:

#	Time	Action	Message	Duration / Fetch
1	20:46:53	select e.first_name, e.last_name, e.birth_date from employees e order by e.birth_date ...	300024 row(s) returned	0.218 sec / 0.047 sec
2	20:47:28	select e.first_name, e.last_name, e.birth_date from employees e order by e.birth_date ...	300024 row(s) returned	0.234 sec / 0.063 sec

33

```
alter table employees add SSN int not null;
```


the screenshot displays SSN attribute is in employees table.

The screenshot displays a database management interface. At the top, a query editor shows the command `desc employees;`. Below this, a 'Result Grid' displays the table structure for 'employees'.

Field	Type	Null	Key	Default	Extra
emp_no	int	NO	PRI	NULL	
birth_date	date	NO		NULL	
first_name	varchar(14)	NO		NULL	
last_name	varchar(16)	NO		NULL	
gender	enum('M','F')	NO		NULL	
hire_date	date	NO		NULL	
SSN	int	NO		NULL	

Below the table structure, the 'Output' pane shows the results of four actions:

#	Time	Action	Message	Duration / Fetch
1	20:46:53	select e.first_name, e.last_name, e.birth_date from employees e order by e.birth_date ...	300024 row(s) returned	0.218 sec / 0.047 sec
2	20:47:28	select e.first_name, e.last_name, e.birth_date from employees e order by e.birth_date ...	300024 row(s) returned	0.234 sec / 0.063 sec
3	20:56:28	alter table employees add SSN int not null	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.485 sec
4	20:56:50	desc employees	7 row(s) returned	0.000 sec / 0.000 sec

34.

insert into employees (emp_no, birth_date, first_name, last_name, gender, hire_date, SSN)

values (500000, "1980-01-01", "Steve", "Smith", "M", "2021-02-21", 0);

the screenshot displays the employee in the employees table.

Query 1 x employees

SQL Additions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

```
1 select *
2 from employees
3 where emp_no like '500000';
4
5
6
7
8
9
10
11
12
13
14
```

Result Grid

emp_no	birth_date	first_name	last_name	gender	hire_date	SSN
500000	1980-01-01	Steve	Smith	M	2021-02-21	0
NULL	NULL	NULL	NULL	NULL	NULL	NULL

employees 5 x

Output

#	Time	Action	Message	Duration / Fetch
1	21:29:28	select * from employees where emp_no like '500000'	1 row(s) returned	0.141 sec / 0.000 sec

35.

d005 has highest number of employees

select dept_no as deptno, count(*) as setcount

from dept_emp

group by dept_no

order by setcount desc;

Query 1: employees

```
1 select dept_no as deptno, count(*) as setcount
2 from dept_emp
3 group by dept_no
4 order by setcount desc;
```

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

deptno	setcount
d005	85707
d004	73485
d007	52245
d009	23580
d008	21126
d001	20211
d006	20117
d003	17786
d002	17346

Result 13 x

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	21:41:37	select dept_no as deptno, count(*) as setcount from dept_emp group by dept_no	o... 9 row(s) returned	0.063 sec / 0.000 sec

36.

d002 has the least number of employees

select dept_no as deptno, count(*) as setcount

from dept_emp

group by dept_no

order by setcount asc;

Query 1 x employees

Don't Limit

```

1 select dept_no as deptno, count(*) as setcount
2 from dept_emp
3 group by dept_no
4 order by setcount asc;
5
6
7
8
9
10
11
12
13
14
15

```

SQL Additions: ...

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid

deptno	setcount
d002	17346
d003	17786
d006	20117
d001	20211
d008	21126
d009	23580
d007	52245
d004	73485
d005	85707

Result 14 x

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	21:41:37	select dept_no as deptno, count(*) as setcount from dept_emp group by dept_no o...	9 row(s) returned	0.063 sec / 0.000 sec
2	21:42:37	select dept_no as deptno, count(*) as setcount from dept_emp group by dept_no ord...	9 row(s) returned	0.062 sec / 0.000 sec

37

Find the employee who met the condition

```
select de.dept_no, e.*, s.salary
```

```
from employees e, salaries s, dept_emp de
```

```
where de.dept_no = "d001" and de.emp_no = s.emp_no and s.emp_no = e.emp_no
```

```
order by s.salary desc;
```

the employees's emp_no is 466852

delete

from employees

where emp_no = 466852;

the person does not show up anymore

Query 1 employees

Don't Limit

SQLAdditions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

1 select de.dept_no, e.*, s.salary

2 from employees e, salaries s, dept_emp de

3 where de.dept_no = "d001" and de.emp_no = s.emp_no and s.emp_no = e.emp_no

4 order by s.salary desc;

5

6

7

8

9

10

11

12

13

14

15

Result Grid

Filter Rows:

Export:

Wrap Cell Contents

Fetch rows:

dept_no	emp_no	birth_date	first_name	last_name	gender	hire_date	SSN	salary
d001	466852	1961-12-01	Akemi	Warwick	M	1985-05-07	0	145128
d001	89825	1952-07-19	Ingmar	Isard	M	1986-05-23	0	143644
d001	466852	1961-12-01	Akemi	Warwick	M	1985-05-07	0	143086
d001	89825	1952-07-19	Ingmar	Isard	M	1986-05-23	0	142753
d001	107140	1960-05-05	Ortrud	Diderrich	M	1987-12-08	0	142506
d001	80937	1955-07-09	Chikako	Jiang	M	1985-08-09	0	142485
d001	51531	1961-10-26	Clyde	Georgako...	F	1987-05-17	0	142181
d001	51531	1961-10-26	Clyde	Georgako...	F	1987-05-17	0	141842
d001	102078	1957-11-11	Sungwon	Vural	M	1988-05-30	0	140974
d001	89825	1952-07-19	Ingmar	Isard	M	1986-05-23	0	140692
d001	51531	1961-10-26	Clyde	Georgako...	F	1987-05-17	0	140542
d001	477358	1952-08-28	Minghong	Siegnist	M	1985-05-21	0	140077
d001	466852	1961-12-01	Akemi	Warwick	M	1985-05-07	0	139827
d001	107140	1960-05-05	Ortrud	Diderrich	M	1987-12-08	0	139688
d001	80937	1955-07-09	Chikako	Jiang	M	1985-08-09	0	139577
d001	477358	1952-08-28	Minghong	Siegnist	M	1985-05-21	0	138842
d001	278498	1962-12-20	Salvador	Luca	F	1985-10-14	0	138755
d001	235645	1955-07-20	Mona	Carrere	F	1985-11-26	0	138637
d001	51531	1961-10-26	Clyde	Georgako...	F	1987-05-17	0	138198
d001	89825	1952-07-19	Ingmar	Isard	M	1986-05-23	0	138110
d001	475041	1960-07-22	Moty	Pellegrinelli	F	1988-06-24	0	137413
d001	102078	1957-11-11	Sungwon	Vural	M	1988-05-30	0	137342
d001	475041	1960-07-22	Moty	Pellegrinelli	F	1988-06-24	0	136998

Read Only

Context Help

Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	21:41:37	select dept_no as deptno, count(*) as setcount from dept_emp group by dept_no	9 row(s) returned	0.063 sec / 0.000 sec
2	21:42:37	select dept_no as deptno, count(*) as setcount from dept_emp group by dept_no ord...	9 row(s) returned	0.062 sec / 0.000 sec
3	21:47:08	select de.dept_no, e.*, s.salary from employees e, salaries s, dept_emp de where de...	190861 row(s) returned	0.687 sec / 0.078 sec

Query 1 employees

```

1
2 • select de.dept_no, e.*, s.salary
3   from employees e, salaries s, dept_emp de
4  where de.dept_no = "d001" and de.emp_no = s.emp_no and s.emp_no = e.emp_no
5  order by s.salary desc;
6
7
8
9
10
11
12
13
14
15
16

```

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid

dept_no	emp_no	birth_date	first_name	last_name	gender	hire_date	SSN	salary
d001	89825	1952-07-19	Ingmar	Isard	M	1986-05-23	0	143644
d001	89825	1952-07-19	Ingmar	Isard	M	1986-05-23	0	142753
d001	107140	1960-05-05	Ortrud	Diderrich	M	1987-12-08	0	142506
d001	80937	1955-07-09	Chikako	Jiang	M	1985-08-09	0	142485
d001	51531	1961-10-26	Clyde	Georgako...	F	1987-05-17	0	142181
d001	51531	1961-10-26	Clyde	Georgako...	F	1987-05-17	0	141842
d001	102078	1957-11-11	Sungwon	Vural	M	1988-05-30	0	140974
d001	89825	1952-07-19	Ingmar	Isard	M	1986-05-23	0	140692
d001	51531	1961-10-26	Clyde	Georgako...	F	1987-05-17	0	140542
d001	477358	1952-08-28	Minghong	Siegrist	M	1985-05-21	0	140077
d001	107140	1960-05-05	Ortrud	Diderrich	M	1987-12-08	0	139688
d001	80937	1955-07-09	Chikako	Jiang	M	1985-08-09	0	139577
d001	477358	1952-08-28	Minghong	Siegrist	M	1985-05-21	0	138842
d001	278498	1962-12-20	Salvador	Luca	F	1985-10-14	0	138755
d001	235645	1955-07-20	Mona	Carrere	F	1985-11-26	0	138637
d001	51531	1961-10-26	Clyde	Georgako...	F	1987-05-17	0	138198
d001	89825	1952-07-19	Ingmar	Isard	M	1986-05-23	0	138110
d001	475041	1960-07-22	Moty	Pellegrinelli	F	1988-06-24	0	137413
d001	102078	1957-11-11	Sungwon	Vural	M	1988-05-30	0	137342
d001	475041	1960-07-22	Moty	Pellegrinelli	F	1988-06-24	0	136898
d001	80937	1955-07-09	Chikako	Jiang	M	1985-08-09	0	136746
d001	475041	1960-07-22	Moty	Pellegrinelli	F	1988-06-24	0	136539
d001	89825	1952-07-19	Ingmar	Isard	M	1986-05-23	0	136529

Result 16

Output

#	Time	Action	Message	Duration / Fetch
1	21:41:37	select dept_no as deptno, count(*) as setcount from dept_emp group by dept_no	9 row(s) returned	0.063 sec / 0.000 sec
2	21:42:37	select dept_no as deptno, count(*) as setcount from dept_emp group by dept_no ord...	9 row(s) returned	0.062 sec / 0.000 sec
3	21:47:08	select de.dept_no, e.*, s.salary from employees e, salaries s, dept_emp de where de...	190861 row(s) returned	0.687 sec / 0.078 sec
4	21:51:11	delete from employees where emp_no = 466852	1 row(s) affected	0.031 sec
5	21:51:30	select de.dept_no, e.*, s.salary from employees e, salaries s, dept_emp de where de...	190843 row(s) returned	0.563 sec / 0.078 sec

38.

No

select e.*, s.salary

from employees e left outer join salaries s

on e.emp_no = s.emp_no

where s.salary = null;

Query 1 x employees

1 • select e.*, s.salary
2 from employees e left outer join salaries s
3 on e.emp_no = s.emp_no
4 where s.salary = null;
5
6
7
8
9
10
11
12
13
14
15
16

SQLAdditions:.....

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid

emp_no	birth_date	first_name	last_name	gender	hire_date	SSN	salary
--------	------------	------------	-----------	--------	-----------	-----	--------

Result 17 x

Read Only Context Help Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	21:41:37	select dept_no as deptno, count(*) as setcount from dept_emp group by dept_no	9 row(s) returned	0.063 sec / 0.000 sec
2	21:42:37	select dept_no as deptno, count(*) as setcount from dept_emp group by dept_no	9 row(s) returned	0.062 sec / 0.000 sec
3	21:47:08	select de.dept_no, e.*, s.salary from employees e, salaries s, dept_emp de where de...	190861 row(s) returned	0.687 sec / 0.078 sec
4	21:51:11	delete from employees where emp_no = 466852	1 row(s) affected	0.031 sec
5	21:51:30	select de.dept_no, e.*, s.salary from employees e, salaries s, dept_emp de where de...	190843 row(s) returned	0.563 sec / 0.078 sec
6	21:53:56	select e.*, s.salary from employees e left outer join salaries s on e.emp_no = s.emp_no...	0 row(s) returned	0.656 sec / 0.000 sec

39.

CREATE TABLE `employees`.`dependent` (

 `name` VARCHAR(45) NOT NULL,

 `birth_date` DATE NULL,

 `parent_name` VARCHAR(45) NULL,

 `phone_number` VARCHAR(45) NULL,

PRIMARY KEY (`name`));

The screenshot shows that the table is added.

The screenshot displays a database management interface. The top section is a query editor with a tab labeled 'Query 1' and 'employees'. The query text is 'show tables;'. Below the editor is a toolbar with various icons. The bottom section shows the 'Result Grid' with a list of tables: departments, dependent, dept_emp, dept_manager, employees, salaries, and titles. The 'employees' table is selected. On the right side, there is a sidebar with icons for 'Result Grid', 'Form Editor', 'Field Types', 'Query Stats', and 'Execution Plan'. At the bottom, there is an 'Output' pane showing a log of actions and their results.

#	Time	Action	Message	Duration / Fetch
1	21:41:37	select dept_no as deptno, count(*) as setcount from dept_emp group by dept_no	9 row(s) returned	0.063 sec / 0.000 sec
2	21:42:37	select dept_no as deptno, count(*) as setcount from dept_emp group by dept_no ord...	9 row(s) returned	0.062 sec / 0.000 sec
3	21:47:08	select de.dept_no, e.*, s.salary from employees e, salaries s, dept_emp de where de...	190861 row(s) returned	0.687 sec / 0.078 sec
4	21:51:11	delete from employees where emp_no = 466852	1 row(s) affected	0.031 sec
5	21:51:30	select de.dept_no, e.*, s.salary from employees e, salaries s, dept_emp de where de...	190843 row(s) returned	0.563 sec / 0.078 sec
6	21:53:56	select e.*, s.salary from employees e left outer join salaries s on e.emp_no = s.emp_no...	0 row(s) returned	0.656 sec / 0.000 sec
7	21:59:35	Apply changes to Dependent	Changes applied	
8	22:00:28	show tables	7 row(s) returned	0.000 sec / 0.000 sec

40.

Drop database employees;