

Scott DiBisceglia

CMPT 308 – Lab 2

Query - postgres on postgres@localhost:5433 *

File Edit Query Favorites Macros View Help

SQL Editor Graphical Query Builder

VALUES(1020, 'feb', 'c006', 'a03', 'p07', 600, 600.00);
INSERT INTO Orders(ordno, mon, cid, aid, pid, qty, dollars)
VALUES(1021, 'feb', 'c004', 'a06', 'p01', 1000, 460.00);
INSERT INTO Orders(ordno, mon, cid, aid, pid, qty, dollars)
VALUES(1022, 'mar', 'c001', 'a05', 'p04', 400, 720.00);
INSERT INTO Orders(ordno, mon, cid, aid, pid, qty, dollars)
VALUES(1023, 'mar', 'c001', 'a04', 'p05', 500, 450.00);
INSERT INTO Orders(ordno, mon, cid, aid, pid, qty, dollars)
VALUES(1024, 'mar', 'c006', 'a06', 'p01', 800, 400.00);
INSERT INTO Orders(ordno, mon, cid, aid, pid, qty, dollars)
VALUES(1025, 'apr', 'c001', 'a05', 'p07', 800, 720.00);
INSERT INTO Orders(ordno, mon, cid, aid, pid, qty, dollars)
VALUES(1026, 'may', 'c002', 'a05', 'p03', 800, 740.00);

-- SQL statements for displaying example data into the CAP2 database
-- Connect to your Postgres server and set the active database to CAP2. Then . . .

select *
from customers;

select *
from agents;

select *
from products;

select *
from orders;

Output pane

cid	name	city	discount
character(4)	text	text	numeric(5,2)
1	c001	Tipton	Duluth 10.00
2	c002	Benton	Dallas 10.00
3	c003	Allied	Dallas 8.00
4	c004	JACM	Duluth 8.00
5	c005	Weyland-Mitcherson	0.00
6	c006	JACM	WVeto 0.00

OK

Unix Ln 188 Col 1 Ch 583D 6 rows 14 ms

7:18 PM 2/17/2015

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from customers;

select *
from agents;

select *
from products;

select *
from orders;

Output pane

aid	name	city	percent
character(3) text	text	text	real
1	a01	Smith	New York 6
2	a02	Jones	Sevark 6
3	a03	Frank	Tarvo 7
4	a04	Gray	New York 6
5	a05	Green	Duluth 5
6	a06	Smith	Dallas 5
7	a07	Ward	London 7

OK

Unix Ln 191 Col 9 Ch 5844 7 rows 12 ms

7:19 PM 2/17/2015

Query - postgres on postgres@localhost:5433

File Edit Query Favorites Macros View Help

postgres on postgres@localhost:5433

SQ Editor (Graphical Query Builder)

```
VALUES (1020, 'feb', 'c006', 'a03', 'p07', 600, 600.00);
INSERT INTO Orders( ordno, mon, cid, aid, pid, qty, dollars )
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from customers;

select *
from agents;

select *
from products;

select *
from orders;
```

Output pane

	pid	name	city	quantity	pricedollars
	character(3)	text	text	integer	numeric(10,2)
1	p01	comb	Dallas	111400	0.50
2	p02	brush	Hewark	200600	0.50
3	p03	razor	Duluth	150600	1.00
4	p04	pen	Duluth	125300	1.00
5	p05	pen	Dallas	221400	1.00
6	p06	folder	Dallas	123100	2.00
7	p07	case	Hewark	100800	1.00
8	p08	clip	Hewark	200600	1.25

OK

Unix Ln 194 Col 1 Ch 585B 8 rows 12 ms

Query - postgres on postgres@localhost:5433

File Edit Query Favorites Macros View Help

postgres on postgres@localhost:5433

SQ Editor (Graphical Query Builder)

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select *
from customers;

select *
from agents;

select *
from products;

select *
from orders;
```

Output pane

	ordno	mon	cid	aid	pid	qty	dollars
	integer	character(3)	character(3)	character(3)	character(3)	integer	numeric(12,2)
1	1011	jan	c001	a01	p01	1000	450.00
2	1013	jan	c002	a03	p03	1000	880.00
3	1015	jan	c003	a03	p05	1200	1104.00
4	1016	jan	c006	a01	p01	1000	800.00
5	1017	feb	c001	a06	p03	600	540.00
6	1018	feb	c001	a03	p04	400	540.00
7	1019	feb	c001	a02	p02	400	340.00
8	1020	feb	c006	a03	p07	600	600.00
9	1021	feb	c004	a06	p01	1000	460.00
10	1022	mar	c001	a05	p06	400	720.00
11	1023	mar	c001	a04	p05	500	450.00
12	1024	mar	c006	a06	p01	800	400.00
13	1025	apr	c001	a05	p07	800	720.00
14	1026	may	c002	a05	p03	800	740.00

OK

Unix Ln 297 Col 1 Ch 5884 14 rows 12 ms

1. After running the following queries and comparing them to the charts at <http://www.labouseur.com/courses/db/cap2.pdf>, I have realized that the queries are the exact same charts on the second page. Each of the charts match the queries that I inputted through PGAdmin.
2. There are four main keys when it comes to database management, three of these are; primary, candidate and superkey. A superkey is the query that retrieves any set of columns that ID every row in the section. Followed by a candidate key, which gives the smallest number of columns or runs a more specific search through the database. Which finally brings the Primary key which is a type of candidate key but the one that you would choose to get the best results.
3. In real life, there are numerous reasons in which you would create a table of data. One example would be in a company to track who gets benefits under an employee's salary. The columns in this table would be Last Name, Initials, and Dependent 1, dependent 2 etc. In order each data type would be "text". If the data was asking for the amount of benefits or any number the data type would then be "numeric". The only columns in this type of table that would be nullable are the dependent columns. If one employee had five people under his plan, there would be five columns for every one else even if they had less than five people under their plan, in this case their dependent column would be null.

Last Name	Initials	Dependent 1	Dependent 2	Dependent 3	Dependent 4
DiBisceglia	SJ	Payton	Dakota	Clay	Gordon
Wright	DA	Mary	Null	Null	Null

4. There are three main relational rules when it comes to database management. The first rule is known as the first normal form rule, or that there cannot be multi-valued attributes. Which means in a specific part of column, there cannot be more than one piece of data. Given the example in the previous question, according to the rule each person would be under their own column, you cannot put all five dependents in one section. The second rule is the "What Not Where" rule which states that you cannot just say "Give me the second row" when searching a database because the rows are not a set format, they will be different depending on how the data is entered into the database. And finally, the third rule is all rows must be unique which means that you cannot have the same exact data over two rows because the query would not run properly since the same information is listed twice throughout.