Tori Lentz

Dave Retterer

Databases

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Database Schema

For this assignment I chose to make my tables have to do with art supplies. I created seven different tables within my admin_lentz schema:

supply(ID, name)

medium(ID, name, supply)

frequents(shoppers, store)

sells(store, supply, price)

store(ID, name, address, website, phone)

shoppers(ID, name, address, phone)

likes(shoppers, medium)

Displayed below are some screenshots of what my tables look like.

shoppers

ID	name	address	phone
1	Tori Lentz	Centerville OH	9372699299
2	Debbie Lentz	Centerville OH	5133109326
3	Lynn Maier	Springboro OH	9375624512
4	Cassandra Gram	Cincinnati OH	5134562898
5	Linda Bittner	Cincinnati OH	5134459976
6	Leonard Williams	Cincinnati OH	5139876545
7	John Ruthven	Germantown OH	9378765090
8	Devere Burt	Cincinnati OH	5132325646
9	Nancy Macarthy	Cincinnati OH	5132234665

frequents

shoppers	store
Tori Lentz	The Plaza
Tori Lentz	Dick Blick
Tori Lentz	The Ring Lord
Tori Lentz	Amazon
Debbie Lentz	The Plaza
Debbie Lentz	Dick Blick
Debbie Lentz	The Ring Lord
Lynn Maier	Jo-Ann Fabric Store
Cassandra Gram	Dick Blick
Linda Bittner	The Plaza
Leonard Williams	The Plaza
John Ruthven	Dick Blick
Devere Burt	The Plaza
Devere Burt	Dick Blick
Nancy Macarthy	Amazon
Nancy Macarthy	Hobby Lobby

sells

store	supply	price
Amazon	aqua brush	4
Amazon	paint pallet	8
Amazon	photo paper	25
Dick Blick	aluminum wire	15
Dick Blick	brushes	3
Dick Blick	canvas	8
Dick Blick	charcoal	14
Dick Blick	clay	20
Dick Blick	colored pencil	3
Dick Blick	eraser	1
Dick Blick	glaze	16
Dick Blick	ink	4
Dick Blick	markers	15
Dick Blick	paint	5
Dick Blick	paint pallet	11
Dick Blick	pastel	3
Dick Blick	pencil	1
Dick Blick	pencil sharpener	4
Dick Blick	pens	12
Dick Blick	ruler	3
Dick Blick	sculpting tools	10
Dick Blick	sketchbook	10
Dick Blick	tracing paper	4
Dick Blick	turpentine	5
Hobby L…	canvas	10

supply

ID	name
1	sketchbook
2	brushes
3	pencil
4	colored pencil
5	pencil sharpener
6	eraser
7	paint
8	ink
9	ruler
10	canvas
11	pens
12	markers
13	inktense pencils
14	tracing paper
15	photo paper
16	frames
17	fabric
18	string
19	needles
20	yarn
21	chain maille rings
22	scales
23	pliers
24	aqua brush
25	paint pallet

medium

ID	name	supply
1	oil	turpentine
2	oil	brushes
3	oil	paint
4	oil	canvas
5	oil	frames
6	watercolor	brushes
7	watercolor	paint
8	watercolor	colored pencils
9	watercolor	aqua brushes
10	watercolor	paint pallet
11	acrylic	paint
12	acrylic	paint pallet
13	acrylic	brushes
14	acrylic	canvas
15	graphite	pencil
16	graphite	eraser
17	graphite	pencil sharpener
18	pen and ink	markers
19	pen and ink	pens
20	pen and ink	ink
21	pen and ink	brushes
22	jewelry	pliers
23	jewelry	scales
24	jewelry	chain maille rings
25	mixed media	glue

likes

shoppers	medium
Tori Lentz	watercolor
Debbie Lentz	oil
Lynn Maier	quilting
Cassandra Gram	jewelry
Linda Bittner	acrylic
Leonard Williams	acrylic
John Ruthven	watercolor
Devere Burt	acrylic
Nancy Macarthy	acrylic
Tori Lentz	acrylic
Tori Lentz	mixed medium
Tori Lentz	sculpture
Tori Lentz	pen and ink
Tori Lentz	jewelry
Debbie Lentz	acrylic
Debbie Lentz	scratchboard
Debbie Lentz	jewelry
Debbie Lentz	pastel
Lynn Maier	needlework
Cassandra Gram	sculpture
Cassandra Gram	acrylic
Linda Bittner	pastel
Leonard Williams	oil
John Ruthven	graphite

store

ID	name	address	website	phone
1	Dick Blick	6486 Sawmill Road Sawm…	www.dickblick.com/	6147921900
2	Dick Blick	612 North High Street C…	www.dickblick.com/	6142247708
3	Dick Blick	2768 Mayfield Road Clev…	www.dickblick.com/	2163713500
4	United Art and …	Market At Mill Run, 3622 …	www.unitednow.com/	6145278508
5	United Art and …	Washington Park Plaza, …	www.unitednow.com/	9374326471
6	United Art and …	12037 Lebanon Rd, Shar…	www.unitednow.com/	5137697999
7	The Plaza	230 W McMillan St, Cinci…	www.plazaart.com/	5138610667
8	The Plaza	8118 Montgomery Rd, Ci…	www.plazaart.com/	5137935300
9	The Plaza	701 Main St, Cincinnati, …	www.plazaart.com/	5136210726
10	Hobby Lobby	9930 Coletrain Ave, Cinc…	www.hobbylobby.com/	5132450920
11	Hobby Lobby	Governor's Pointe, 9560 …	www.hobbylobby.com/	5137540032
12	Hobby Lobby	Southland 75 Shopping C…	www.hobbylobby.com/	9372912870
13	Hobby Lobby	2700 Elida Rd, Lima, OH …	www.hobbylobby.com/	4192225128
14	Jo-Ann Fabric …	2270 Miamisburg Center…	www.joann.com/	9374351440
15	Jo-Ann Fabric …	2720 Elida Rd, Lima, OH …	www.joann.com/	4193312601
16	Jo-Ann Fabric …	10166 Colerain Avenue, …	www.joann.com/	5132451612
17	The Ring Lord	NULL	theringlord.com/	NULL
18	Amazon	NULL	www.amazon.com/	NULL
NULL	NULL	NULL	NULL	NULL

Select Statement 1

select supply

from admin_lentz.medium

where medium.name = "watercolor";

supply
brushes
paint
colored pencils
aqua brushes
paint pallet

For this select statement I wanted to get all the supplies listed in the medium table that corresponded to the medium name watercolor. In order to accomplish this I selected supply from the medium table and used a where clause so I would only get back the supplies that were listed with watercolor.
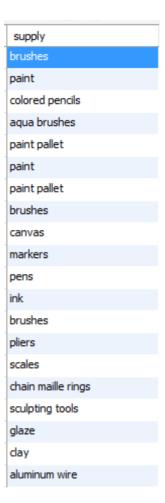
Select Statement 2

select supply

from admin_lentz.medium

join likes

on likes.medium = medium.name

where likes.shoppers = "Tori Lentz";

supply
brushes
paint
colored pencils
aqua brushes
paint pallet
paint
paint pallet
brushes
canvas
markers
pens
ink
brushes
pliers
scales
chain maille rings
sculpting tools
glaze
clay
aluminum wire

For this statement I wanted to get back the supplies that corresponded to all of the mediums that me, the shopper, likes. In order to do this I selected supply from medium and joined the likes and medium table together through the likes.medium column and the medium.name column. In order to get only the results that go with my name I used a where clause.

Select Statement 3

select likes.medium, frequents.store

from shoppers

join likes

on shoppers.name = likes.shoppers

join frequents

on shoppers.name = frequents.shoppers

where likes.shoppers = "Tori Lentz";

I wanted to join multiple tables together so I used two joins in order to get results from the likes table and the frequents table through the shoppers table. I joined shoppers.name with likes.shoppers and shoppers.name with frequents.shoppers. Then I wanted only results for Tori Lentz so I did where likes .shoppers equals my name. The resulting table will give back the medium and store that goes with Tori Lentz.

medium	store
watercolor	The Plaza
acrylic	The Plaza
mixed medium	The Plaza
sculpture	The Plaza
pen and ink	The Plaza
jewelry	The Plaza
watercolor	Dick Blick
acrylic	Dick Blick
mixed medium	Dick Blick
sculpture	Dick Blick
pen and ink	Dick Blick
jewelry	Dick Blick
watercolor	The Ring Lord
acrylic	The Ring Lord
mixed medium	The Ring Lord
sculpture	The Ring Lord
pen and ink	The Ring Lord
jewelry	The Ring Lord
watercolor	Amazon
acrylic	Amazon
mixed medium	Amazon
sculpture	Amazon
pen and ink	Amazon
jewelry	Amazon

Select Statement 4

select store, likes.medium, count(frequents.shoppers) as frequents_count

from shoppers

join likes

on shoppers.name = likes.shoppers

join frequents

on shoppers.name = frequents.shoppers

where likes.medium = "watercolor"

group by store, likes.medium;

store	medium	frequents_count
Amazon	watercolor	1
Dick Blick	watercolor	2
The Plaza	watercolor	1
The Ring Lord	watercolor	1

My last select statement is the most complicated yet, shows some cool applications of SQL. In order to get the resultant table that I wanted I selected store and likes.medium as well as a count. This count function will count the number of shoppers that frequent each store and this new column will be named frequents_count. These columns will be coming from the shoppers table and builds upon the previous statement. The where clause was changed to be where likes.medium equals watercolor and the columns will be grouped by store and likes.medium.

Overall I had a lot of fun with this assignment. The more I write in select statements the more they make sense to me and I always find it interesting as to what I can do. This time around I discovered the count function as well as the group by and would like to mess with those more in the future. I ended up putting a lot of tuples in the tables I made and was unable to show them all in the screen shots but I thought it was interesting and helpful to add all the information that I did. I also ended up adding an extra table that does not correspond with the original example but I though it would be a nice addition due to the subject matter and this table was medium.