

Warby Parker Capstone

Learn SQL from Scratch Reem Sabha June 14th, 2018

Q: What columns does the table have?

Code: SELECT * FROM survey LIMIT 10;

Query Results				
question	user_id	response		
1. What are you looking for?	005e7f99-d48c-4fce-b605-10506c85aaf7	Women's Styles		
2. What's your fit?	005e7f99-d48c-4fce-b605-10506c85aaf7	Medium		
3. Which shapes do you like?	00a556ed-f13e-4c67-8704-27e3573684cd	Round		
4. Which colors do you like?	00a556ed-f13e-4c67-8704-27e3573684cd	Two-Tone		
1. What are you looking for?	00a556ed-f13e-4c67-8704-27e3573684cd	I'm not sure. Let's skip it.		
2. What's your fit?	00a556ed-f13e-4c67-8704-27e3573684cd	Narrow		
5. When was your last eye exam?	00a556ed-f13e-4c67-8704-27e3573684cd	<1 Year		
3. Which shapes do you like?	00bf9d63-0999-43a3-9e5b-9c372e6890d2	Square		
5. When was your last eye exam?	00bf9d63-0999-43a3-9e5b-9c372e6890d2	<1 Year		
2. What's your fit?	00bf9d63-0999-43a3-9e5b-9c372e6890d2	Medium		

• Q: How many times was each question answered? Code:

SELECT question, COUNT (DISTINCT user_id) FROM survey GROUP BY question;

Query Results				
question	COUNT (DISTINCT user_id)			
1. What are you looking for?	500			
2. What's your fit?	475			
3. Which shapes do you like?	380			
4. Which colors do you like?	361			
5. When was your last eye exam?	270			

Q: Using a spreadsheet program like Excel or Google Sheets, calculate the percentage of users who answer each question.:

Which question(s) of the quiz have a lower completion rates?—Question 5
What do you think is the reason?—People forget to make their yearly eye exam appointment!

count(distinct user_id)	Response Rate
500	100%
475	95%
380	76%
361	72%
270	54%
	500 475 380 361

Q: What columns do the tables survey, quiz and home_try_on have?

		Query Results				
user_id		style	fit	shape	C	olor
4e8118dc-bb3d-49bf-85fc-cca8d83232ac	Wor	nen's Styles	Medium	Rectangular	Tor	toise
291f1cca-e507-48be-b063-002b14906468	Wor	nen's Styles	Narrow	Round	В	lack
75122300-0736-4087-b6d8-c0c5373a1a04	Wor	nen's Styles	Wide	Rectangular	Two	-Tone
75bc6ebd-40cd-4e1d-a301-27ddd93b12e2	Wor	nen's Styles	Narrow	Square	Square Two-To	
ce965c4d-7a2b-4db6-9847-601747fa7812	Wor	nen's Styles	Wide	Rectangular	ar Black	
user_id		number_of_pairs		address		
d8addd87-3217-4429-9a01-d56d68111da7		5 pairs		145 New York 9a		
f52b07c8-abe4-4f4a-9d39-ba9fc9a184cc		5 pairs		383 Madison Ave		
8ba0d2d5-1a31-403e-9fa5-79540f8477f9		5 pairs		287 P	ell St	
4e71850e-8bbf-4e6b-accc-49a7bb46c586		3 pairs		347 Madisor	347 Madison Square N	
3bc8f97f-2336-4dab-bd86-e391609d	lab97	5 pairs		182 Cornelia St		
user_id	product_id	style	model_name	color		price
00a9dd17-36c8-430c-9d76-df49d4197dcf	8	Women's Styles	Lucy	Jet Black	(150
00e15fe0-c86f-4818-9c63-3422211baa97	7	Women's Styles	Lucy	Elderflower C	rystal	150
017506f7-aba1-4b9d-8b7b-f4426e71b8ca	4	Men's Styles	Dawes	Jet Black	(150
0176bfb3-9c51-4b1c-b593-87edab3c54cb	10	Women's Styles	Eugene Narrow	Rosewood To	rtoise	95
01fdf106-f73c-4d3f-a036-2f3e2ab1ce06	8	Women's Styles	Lucy	Jet Black	(150

/*Question 4*/ SELECT * FROM quiz LIMIT 5;

SELECT *
FROM home_try_on
LIMIT 5;

SELECT *
FROM purchase
LIMIT 5;

Q: Join all the tables

Query Results				
user_id	is_home_try_on	number_of_pairs	is_purchase	
4e8118dc-bb3d-49bf-85fc-cca8d83232ac	1	3 pairs	0	
291f1cca-e507-48be-b063-002b14906468	1	3 pairs	1	
75122300-0736-4087-b6d8-c0c5373a1a04	0	Ø	0	
75bc6ebd-40cd-4e1d-a301-27ddd93b12e2	1	5 pairs	0	
ce965c4d-7a2b-4db6-9847-601747fa7812	1	3 pairs	1	
28867d12-27a6-4e6a-a5fb-8bb5440117ae	1	5 pairs	1	
5a7a7e13-fbcf-46e4-9093-79799649d6c5	0	Ø	0	
0143cb8b-bb81-4916-9750-ce956c9f9bd9	0	Ø	0	
a4ccc1b3-cbb6-449c-b7a5-03af42c97433	1	5 pairs	0	
b1dded76-cd60-4222-82cb-f6d464104298	1	3 pairs	0	

SELECT q.user_id,
h.user_id IS NOT NULL AS 'is_home_try_on',
h.number_of_pairs,
p.user_id IS NOT NULL AS 'is_purchase'
FROM quiz q
LEFT JOIN home_try_on h
ON q.user_id = h.user_id
LEFT JOIN purchase p
ON p.user_id = q.user_id
LIMIT 10;

Q: What is the most popular color from the purchase table?

	project.sqlite		Query Results			
			color	model_name	count(user_id)	
	select color, model_nc	ame count(user id)	Jet Black	Lucy	86	
	from purchase	ame, courte aser_tay	Driftwood Fade	Dawes	63	
	group by 1		Rosewood Tortoise	Eugene Narrow	62	
4	order by 3 desc;		Rose Crystal	Eugene Narrow	54	
			Layered Tortoise Matte	Brady	52	
			Pearled Tortoise	Olive	50	
			Elderflower Crystal	Lucy	44	
			Sea Glass Gray	Brady	43	
			Endangered Tortoise	Monocle	41	

Q: What are the most popular color from the quiz table?

	project.sqlite	م لا	Query Results		
	project.squite	Ľ	color	shape	count(user_id)
	select color, shape, count(user_id)		Tortoise	Square	292
2	from quiz group by 1 order by 3 desc;	ounc(user_tu)	Black	Round	280
3			Crystal	Square	210
4			Neutral	Square	114
	5. dc. 25 2 dc2c,		Two-Tone	Round	104

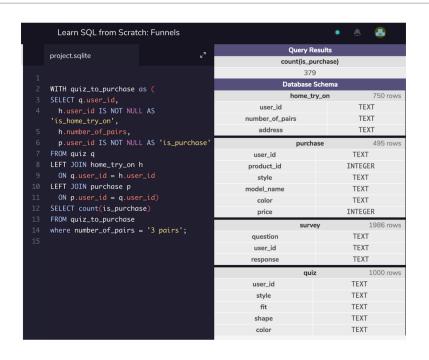
Q: What are the most popular models?

	project.sqlite	ر ا		Query Results	
	project.squte	V.	model_name	price	count(user_id)
1	select model_name, pri	CA	Eugene Narrow	95	116
	count(user_id)	ce,	Dawes	150	107
2	from purchase		Brady	95	95
3	group by 1		Lucy	150	86
4	order by 3 desc;		Olive	95	50
	,		Monocle	50	41

Q: What is the conversion rate from trying on to purchasing?

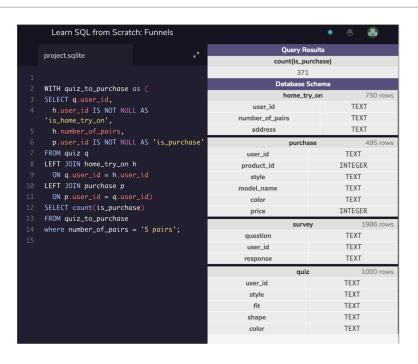
Query Results		
count(*)	100.00*SUM(is_purchase)/SUM(is_home_try_on)	
1000	66.0	

Q: How many people who tried on 3 pairs purchased glasses?



```
WITH quiz to purchase as (
SELECT q.user id,
             h.user id IS NOT NULL AS
'is home try on',
             h.number of pairs,
             p.user id IS NOT NULL AS 'is purchase'
FROM quiz q
LEFT JOIN home try on h
             ON q.user id = h.user id
LEFT JOIN purchase p
             ON p.user id = q.user id)
SELECT count(is purchase)
FROM quiz to purchase
WHERE number of pairs = '3 pairs';
```

Q: How many people who tried on 5 pairs bought glasses?



```
WITH quiz to purchase as (
SELECT q.user id,
             h.user id IS NOT NULL AS
'is home try on',
             h.number of pairs,
             p.user id IS NOT NULL AS 'is purchase'
FROM quiz q
LEFT JOIN home try on h
             ON q.user id = h.user id
LEFT JOIN purchase p
             ON p.user id = q.user id)
SELECT count(is purchase)
FROM quiz to purchase
WHERE number of pairs = '5 pairs';
```