



# Learn SQL From Scratch

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# Understanding the Warby Parker Data

- The Warby Parker data set is an aggregation of responses to an online quiz
- The Quiz consists of 5 questions
- Each row is a question, user id, and response combination
- There will not be an even number of questions per user id, as not all users completed all five questions
- The better view the data, the code to the side was used

```
select * from survey  
limit 10;
```



# What is the Funnel?

- For this data set, the funnel we wish to examine is the conversion rate from the quiz to purchases
- We also want to examine the response rates for each question
- The 'Home Try On' funnel is also available, showing how many people utilized the ability to try on glasses at home



# Checking the Response Rates

- We wanted to examine the number of responses for each of the five questions
- The code shown to the side was used to pull the responses
- Percentages were calculated using microsoft excel
- The fifth questions has the lowest response rate
- This may be because not all users felt compelled to complete the survey

```
select question,  
       count(distinct user_id)  
from survey  
group by question;
```

Question	Number of Responses	Percent Completed
1	500	1
2	475	0.95
3	380	0.76
4	361	0.722
5	270	0.54



# Examining the Home Try On Data

- This funnel consists of three data sets titled
  - Quiz
  - Home\_Try\_On
  - Purchase
- To make all three of these tables useful, they must first be understood
- The code to the side was used to examine the columns and get a feel for the data
- This shows the first five lines of all three tables separately

```
select * from quiz  
limit 5;
```

```
select * from home_try_on  
limit 5;
```

```
select * from purchase  
limit 5;
```



# Examining the Home Try On Data Continued

- Now that the three previous tables are understood, they can be made useful
- They were combined to create one new table, with all the required information
- The code to the side shows what was done to create the large table
- The limit of 10 rows was added to increase the runtime

```
select distinct q.user_id,  
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 as 'q'  
left join home_try_on as 'h'  
on h.user_id = q.user_id  
left join purchase as 'p'  
on p.user_id = q.user_id  
limit 10;
```



# Examining the Home Try On Data Continued

- Now that the full table has been created, the analysis can be completed
- The code from the previous slide was inserted into the code on the right in the parentheses to complete the analysis

```
with funnels as (  
  ...  
)  
select count(user_id) as 'num_users',  
       sum(is_home_try_on) as 'num_try',  
       sum(is_purchase) as 'num_purchase',  
       1.0 * sum(is_home_try_on) / count(user_id) as  
       'browse_to_try',  
       1.0 * sum(is_purchase) / sum(is_home_try_on)  
       as 'try_to_purchase'  
from funnels;
```





# Results

- After the previous section was ran, we received the results
- We can see that overall there were 1000 unique users, with 750 deciding to try on pairs at home
- This equates to a conversion rate of 75%
- From there, Warby Parker had 495 customers purchase glasses
- From the home try on to purchase, this is a conversion rate of 66%
- Overall, about half of the customers purchased glasses, which is a solid conversion rate as well