Samantha Ledezma-Pena
Funnels with Warby Parker

1. Quiz Funnel- What columns does the table have?

```
SELECT *
FROM survey
LIMIT 10;
```

2. Quiz Funnel- Number of responses for each question

```
SELECT question,
       COUNT(DISTINCT user_id) AS 'No of Users'
FROM survey
GROUP BY question;
```

4. Purchase Funnel- What are the column names for each table?

```
SELECT *
FROM quiz
LIMIT 5;

SELECT *
FROM home_try_on
LIMIT 5;

SELECT *
FROM purchase
LIMIT 5;
```

5. Purchase Funnel- Use a LEFT JOIN to combine the three tables, starting with the top of the funnel (browse) and ending with the bottom of the funnel (purchase)

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

6.1 Further Analysis (Actionable Insights) Overall conversion rates by aggregating across all rows.

```
WITH PFunnel As
        (SELECT Distinct q.user_id,
        hto.user_id IS NOT NULL as 'is_home_try_on',
        hto.number_of_pairs,
        p.user_id IS NOT NULL as 'is_purchase'
FROM quiz AS q
LEFT JOIN home_try_on AS hto
        ON q.user_id = hto.user_id
LEFT JOIN purchase AS p
        ON hto.user_id = p.user_id)
SELECT
        count(user_id) as 'Total Users',
        sum(is_home_try_on) as 'Home Try On Total',
        sum(is_purchase) as 'Purchase Total',
        1.0 * SUM(is_home_try_on) / COUNT(user_id) as '% of Users with Home
Try On',
        1.0 * SUM(is_purchase) / SUM(is_home_try_on) as '% of Home Try on
that Purchased'
        from PFunnel;
```

6.2 Compare conversion rates from quiz→home_try_on and home_try_on→purchase

```
WITH PFunnel As
        (SELECT Distinct q.user_id,
        hto.user_id IS NOT NULL as 'is_home_try_on',
        hto.number_of_pairs,
        p.user_id IS NOT NULL as 'is_purchase'
FROM quiz AS q
LEFT JOIN home_try_on AS hto
        ON q.user_id = hto.user_id
LEFT JOIN purchase AS p
        ON hto.user_id = p.user_id)
SELECT
        number_of_pairs,
        count(user_id) as 'Total Users',
        sum(is_home_try_on) as 'Home Try On Total',
        sum(is_purchase) as 'Purchase Total',
```

```
                    1.0 * SUM(is_purchase) / SUM(is_home_try_on) as '% of Home Try on
that Purchased'
          FROM PFunnel
          GROUP BY number_of_pairs;
```

6.3 Style quiz responses
```
          SELECT style,
                fit,
                shape,
                color,
                count (*)
          FROM quiz
          GROUP BY style, fit, shape,color
          ORDER BY 5 desc;
```

6.3 Total number of purchases and sales total
```
          --Gives the total number of purchases and sale totals for each product id
          SELECT product_id,
                model_name,
                style,
                color,
                count(*) AS 'Number of Purchases',
                SUM (price) AS 'Total Sales',
                price
          FROM purchase
          GROUP BY 1,2,3,4
          ORDER BY 5 desc;
```

6.4 Purchases and sales by style, men and women
```
                SELECT style,
                count(*) AS 'Number of Purchases',
                SUM (price) AS 'Total Sales',
                SUM (price) / count(*) AS 'Average Price'
          FROM purchase
          GROUP BY 1
          ORDER BY 3 desc;
```

6.4 Count of style (men, women, not sure) from quiz
```
          SELECT style,
                count (*) AS count
          FROM quiz
```

```
GROUP BY style
ORDER BY 2 desc;
```