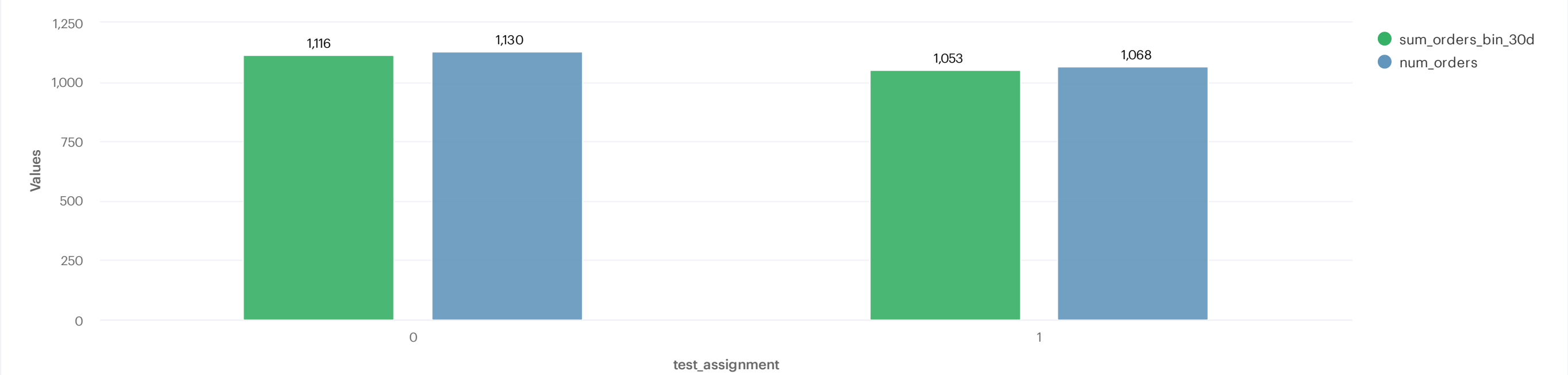


Final Assignment Week 4

The difference between the sum of orders and the last 30 days of orders



The difference between the sum of views and the last 30 days of views



1. Data Quality Check

| | item_id | test_a | test_b | test_c | test_d | test_e | test_f |
|-----|---------|--------|--------|--------|--------|--------|--------|
| 1 | 2512 | 1 | 0 | 1 | 1 | 0 | 1 |
| 2 | 482 | 0 | 1 | 1 | 1 | 0 | 0 |
| 3 | 2446 | 0 | 1 | 1 | 0 | 1 | 0 |
| 4 | 1312 | 0 | 0 | 0 | 0 | 0 | 1 |
| ... | ... | ... | ... | ... | ... | ... | ... |

This table only shows the first 1,000 rows.

2. Reformat the Data

| | item_id | test_assignment | test_number | test_start_date |
|-----|---------|-----------------|-------------|---------------------|
| 1 | 2512 | 1 | test_a | 2023-05-04 19:27:31 |
| 2 | 482 | 0 | test_a | 2023-05-04 19:27:31 |
| 3 | 2446 | 0 | test_a | 2023-05-04 19:27:31 |
| 4 | 1312 | 0 | test_a | 2023-05-04 19:27:31 |
| ... | ... | ... | ... | ... |

3. Compute Order Binary

| | test_assignment | num_orders | sum_orders_bin_30d |
|---|-----------------|------------|--------------------|
| 1 | 0 | 1130 | 1116 |
| 2 | 1 | 1068 | 1053 |

4. Compute View Item Metrics

| | test_assignment | num_views | sum_views_bin_30d | avg_view_bin_30d |
|---|-----------------|-----------|-------------------|------------------|
| 1 | 0 | 1130 | 1130 | 1 |
| 2 | 1 | 1068 | 1068 | 1 |

5. Compute lift and p-value

| | count | test_assignment |
|---|-------|-----------------|
| 1 | 13859 | 0 |
| 2 | 13365 | 1 |