

Final Assignment: Item-level AB Testing

Exercise 1: Check if the the assignment table has all the data we need to compute a 30 day binary metric
No the table is missing key data such as the start date of the test treatments and the number of orders after the treatment.

1. Data Quality Check

	item_id	test_a	test_b	test_c	test_d	test_e	test_f
	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	1000	0	0	0	0	0	0

This table only shows the first 1,000 rows. View complete results in [Report Details](#).

Exercise 2:
Reformat the assignment table to include the test_start_date, a binary column test_assignment (1 for the treatment and 0 for control), and test_number (the type of test performed)

2. Reformat the Data

	item_id	test_assignment	test_number	test_start_date
	item_id	test_assignment	test_number	test_start_date
1	3409	0	item_test_1	2013-01-05 00:00:00
2	301	1	item_test_1	2013-01-05 00:00:00
3	2491	0	item_test_1	2013-01-05 00:00:00
4	1000	0	item_test_1	2013-01-05 00:00:00

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Exercise 3:
Compute order_binary for the 30 day window after the test_start_date for the test named item_test_2

3. Compute Order Binary

	test_assignment	items	orders_completed
	test_assignment	items	orders_completed
1	0	1130	341
2	1	1068	319

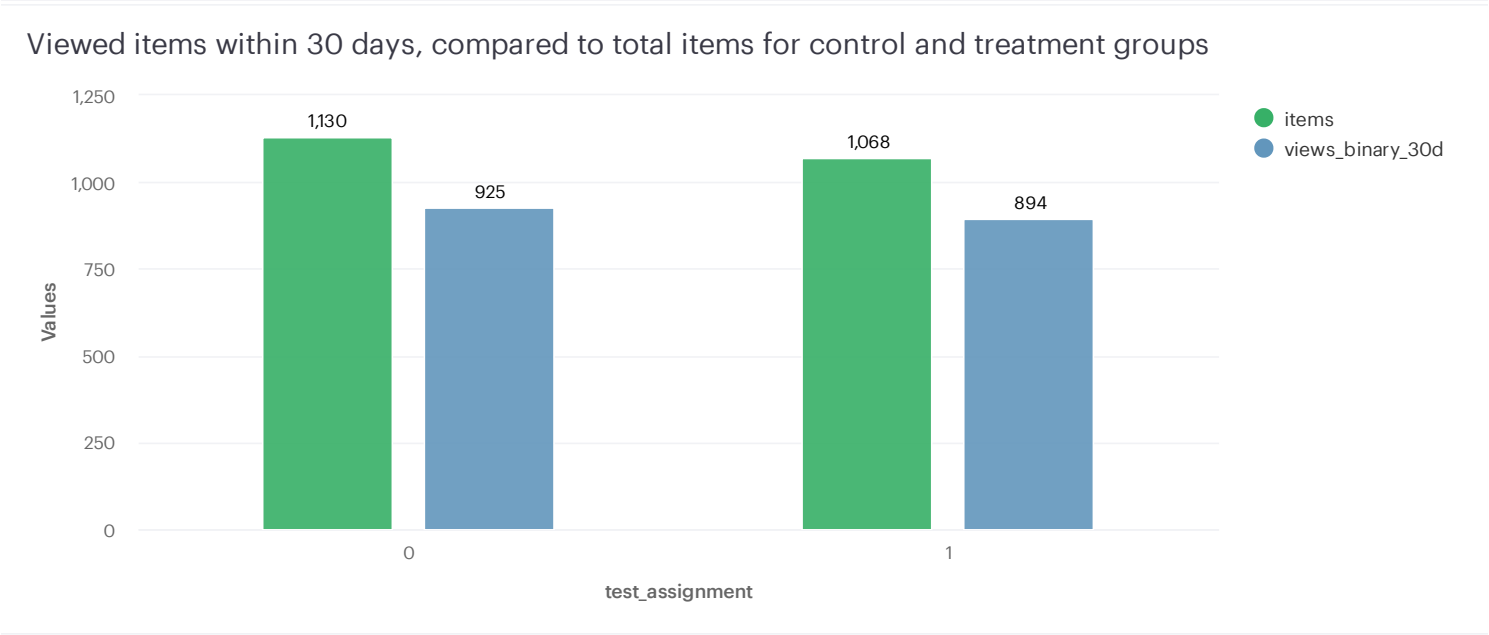
Exercise 4:
Compute view_binary for the 30 day window after the test_start_date for the test named item_test_2

4. Compute View Item Metrics

	test_assignment	items	views_binary_30d
	test_assignment	items	views_binary_30d

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1	0	1130	925
2	1	1068	894



5. Compute lift and p-value

No rows returned

Exercise 5:

Computer the lift and p-value using the AB tool available on <https://thumbtack.github.io/abba/demo/abba.html>

There is no detectable change in the order_binary metric, the p-value is 0.88 and we don't see any improvement as the treatment caused a -1% lift in the success metric.

There is a slight but insignificant change in the view_binary metirc, the p-value is 0.25 (which does not meet the threshold for significance) and the lift caused in the success metric by the treatment is 2.3%

Therefore, there is no statistically significant change to the metrics viewed percent as a result of the treatment.