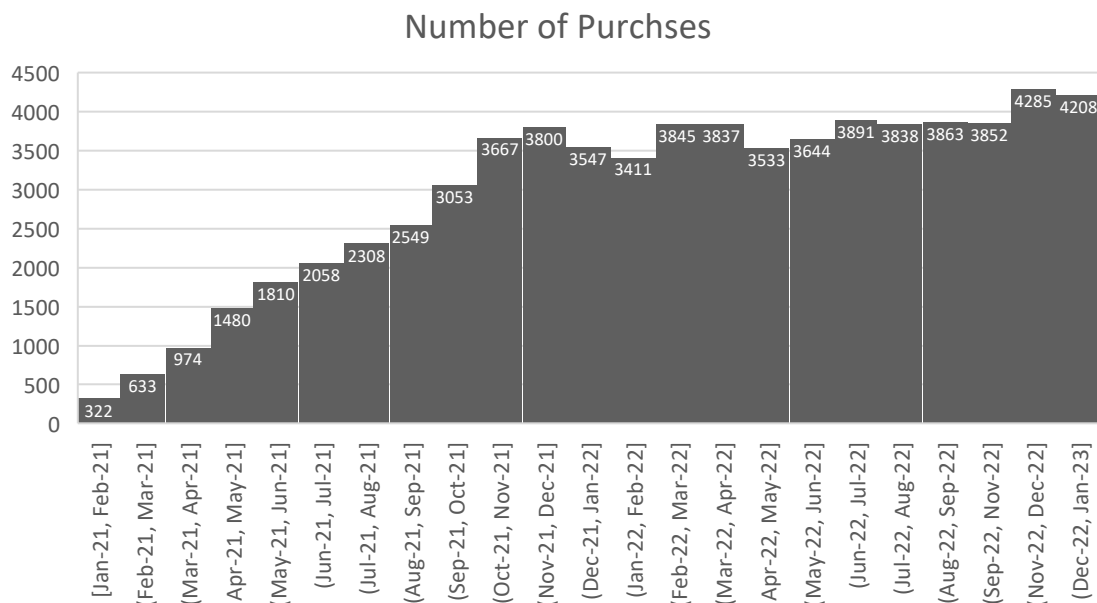**Question 3. After examining the dataset, choose something noteworthy to share with a non-technical stakeholder. This can be anything. Examples are anything you've noticed about the quality of the data, an interesting correlation or change in the data over time, etc. Feel free to include visual aids or additional materials that help illustrate your noteworthy observation.**

The data quality needs to be improved. For instance, errors were found for the purchase date information in the receipts file, where the date "1970-01-01" appeared in 67 receipts record which is apparently a wrong data entry. In addition, there were 2067 missing data points regarding purchase date out of total 70601 observations in this file.

When we look at the number of purchases distribution between January 2021 and January 2023 (see Figure blow), a constant purchase grow was observed until October 2021. This might be because of incomplete data for that period or the weakened consumer spending power due to Covid.

Number of Purchses

The table below shows the top 20 highest unit price purchases with customer id. The top 5 highest unit price purchases were made by the same customer and another customer made rest of the top 10 (6 - 10) highest unit price purchases. There was a big gap between the top 10 highest unit price purchases (>= $31,000) and other purchases (<= $8,700).

Top 20 Highest Unit Price Purchases

unit_price	user_id
31005.99	617376b8a9619d488190e0b6
31005.99	617376b8a9619d488190e0b6
31003.84	617376b8a9619d488190e0b6
31001.50	617376b8a9619d488190e0b6
31001.50	617376b8a9619d488190e0b6
31000.00	609ab37f7a2e8f2f95ae968f
31000.00	609ab37f7a2e8f2f95ae968f
31000.00	609ab37f7a2e8f2f95ae968f
31000.00	609ab37f7a2e8f2f95ae968f
31000.00	609ab37f7a2e8f2f95ae968f
8700.00	6032cb807d464912dab4dc1e
8700.00	6032cb807d464912dab4dc1e
8005.05	61a1a19706570b5913a27b8c
7750.75	617376b8a9619d488190e0b6
5938.03	6032cb807d464912dab4dc1e
5938.03	6032cb807d464912dab4dc1e
5079.28	609756de547223427a2c627e
4745.66	61375682c625197c5db73602
4713.65	5ffb49a847903912705e9a64
4500.00	6032cb807d464912dab4dc1e