**Amazon Purchases Analysis**

**Summary**: This report provides an analysis of how much money has been spent on Amazon purchases. The data for this analysis can be acquired from our amazon accounts. The purpose of this analysis is to identify the purchase patterns and try to minimize and make conscious decisions when purchasing, to reduce expenditure and therefore increase personal savings.

**Data**: Your purchase history data can be acquired from [here](https://www.amazon.com/ap/signin?_encoding=UTF8&openid.assoc_handle=usflex&openid.claimed_id=http%3A%2F%2Fspecs.openid.net%2Fauth%2F2.0%2Fidentifier_select&openid.identity=http%3A%2F%2Fspecs.openid.net%2Fauth%2F2.0%2Fidentifier_select&openid.mode=checkid_setup&openid.ns=http%3A%2F%2Fspecs.openid.net%2Fauth%2F2.0&openid.ns.pape=http%3A%2F%2Fspecs.openid.net%2Fextensions%2Fpape%2F1.0&openid.pape.max_auth_age=900&openid.return_to=https%3A%2F%2Fwww.amazon.com%2Fgp%2Fb2b%2Freports%3Fie%3DUTF8%26ref_%3Dya_d_l_order_reports) while signed in. The time period for analysis can be customized by selecting years and months of interest. For this analysis, I will be using some anonymous data which can be found [here](https://github.com/madhulika95b/Amazon-order-analysis/blob/master/amazon-orders_anonymous.csv).

**Business Questions**: The following are the business questions posed for my analysis.

1. What is the total amount spent on amazon?
2. What is the minimum, maximum, average expenditure?
3. How is the money spent over time (by month)?
4. Does day of the week effect expenditure?
5. How much money has been paid in sales tax?

**Summary of Analysis**:

* A total of 1778 USD is spent on purchases during the year 2019.
* Minimum purchase made, is of 1.04 USD.
* Maximum purchase made, is of 210.99 USD.
* Average amount spent on purchases is around 30 USD.
* Sales tax of about 52 USD is paid for all the purchases made in 2019.
* Maximum purchases are made in the month of July. This could be because of offers and discounts companies offer for Fourth of Sales. (The analysis is run for April to July months range.)

Chart, bar chart

Description automatically generated

* Purchases tend to happen more during the days of Thursday and Friday. A reason for this fashion of purchases could be because the customer may want to receive and/or use the product during weekend. (In the picture below, 0 – Monday; 6 – Sunday)

Chart, bar chart

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**Conclusion**: From the above analysis, we can understand that maximum purchases have been made in the months where we have discounted sales. This is the time when the prices of various products go down which can lure customers into buying things which are not necessary just because they are cheap. So, preparing a budget plan and making conscious purchases during discounted sales time can help us from over purchasing.

The code and dataset used for this analysis can be found on my GitHub [account](https://github.com/madhulika95b/Amazon-order-analysis).