TRADER DATA AND SENTIMENT DATA ANALYSIS REPORT

* Trader dataset contain 211224 rows and 16 columns

* Trader dataset column = ['Account', 'Coin', 'Execution Price', 'Size Tokens',
'Size USD', 'Side',
        'Timestamp IST', 'Start Position', 'Direction', 'Closed PnL',
        'Transaction Hash', 'Order ID', 'Crossed', 'Fee', 'Trade ID',
        'Timestamp']

* Execution Price columns contain minimum value 0.000005 and maximum value is
109004 and in this columns there is huge diffirence between
  mean and median means data is not normally distributed data is skewed with
skewness 2.29941

* Closed PnL contain minimum value -117990.1041 and maximum value is 135329.0901
and Closed PnL also is skewed with 30.69 skewness

* Side columns has two categories Sell and Buy Sell categori contain 108528 and
Buy categori contain 102696

* In the trader dataset each numeric column has outliers

* Trader dataset has not any missing value and duplicate value

* Sentiment dataset has 2644 row and 4 columns

* Sentiment dataset columns = ['timestamp', 'value', 'classification', 'date']

* value column contian minimum value 5 and maximum value 95 and in the mean and
meadian there is no huge difference mean
  data is normally distributed

* Classification columns has categories like Fear,Greed,Extreme Greed,Neutral
and Extreme Fear Fear categori has more counts in the data set so more
  people buy and sell trade in fear then Greed and Extreme Greed etc.

* In the Direction columns cointain many categories and more number people did
trade in open long and then close long and then open short and then close
  short etc.

* In the merged_df dateset numeric columns has not >0.5 correlation amoung them
except Size USD columns has 0.75 correlation with Fee column.

* People Earn profit more in coins like @109 > AVAX > ENA > @85 > PEOPLE and
people loss trade in coins like @135 > TRUMP > @147 > IO

* BTC , SOL,ETH XAI,MATIC coin has high Size USD values

* Most of the coin Buy and Sell when trader has Fear or in Extreme Fear trader
did Buy and Sell more as comapre to other sentiments

* BTC (24,717.32 USD), SOL (11,699.07 USD), ETH (10,600.56 USD), XAI, MATIC are
among the most traded coins, indicating high liquidity and trader interest.

* High trading volumes during Fear and Greed show active market phases.

* Some coins like @20, PENGU, @33, and RSR show net positive profits exceeding
hundreds of thousands to over a million USD, suggesting these were
  historically profitable trading targets.

* Other coins like kBONK, kPEPE, JELLY show significant net losses, reaching
losses of over two million USD in aggregate, highlighting risk or speculative
  trades.

* Positive start positions (e.g., @20, PENGU) reflect strong long exposure.

* Highest fees are paid for trades involving @2, @20, @14, and BTC.

* Sentiment values range from 10 (Extreme Fear) to 94 (Extreme Greed), with a balanced distribution.

* Coins such as BTC (86,454.46 USD) and @142 (90,754.82 USD) represent assets that trade at significantly higher prices per unit compared to other cryptocurrencies.

* Other assets with relatively high average execution prices include PAXG, ETH, MKR, BNB, TAO, AAVE. These are either well-established, high-value coins
   or tokens denominated in high-value units.

* High-price coins tend to be more stable and suitable for large trades.

* Low-price coins may offer higher risk/reward but also increased volatility and lower liquidity.

* Coins such as @2 (26.21), @20 (20.88), @14 (20.22), BTC (5.34), and SOL (2.61) have the highest average trading fees.

* Many standard market coins like ETH, MATIC, SEI, ENS have average fees in the 1.0–2.0 range, reflecting active but not excessive fee generation per trade.

* HYPE leads with ~34,000 SELL and 34,000 BUY trades, indicating high trader engagement and liquidity.

* @107 also shows high activity with ~17,000 SELL and ~12,800 BUY trades.

* BTC is a major market asset, with 14,260 BUY and 11,804 SELL trades.

* For BUY trades, the mean profit/loss is 35.69.

* For SELL trades, the mean profit/loss is 60.71.