Text data analysis (YouTube case study)

* About: 1 billion hour of YouTube content is watched per day, it is second most visited site in the world, it attracts 44%of all internet users 37% of all mobile internet traffic belongs to YouTube.

This dataset deals with real world data

* Objective: the objective of this YouTube analysis project is to gain insights into audience sentiment, engagement, and content trends by performing sentiment analysis, word cloud analysis, emoji analysis, and exploring the impact of punctuation on views, likes, and dislikes. Additionally, the project aims to collect relevant data, identify the most liked categories, analyze audience engagement levels, analyze trending videos, and determine whether there is a correlation between the usage of punctuation and viewer engagement on YouTube.
* Started with importing messy data, cleaning data, merging, concatenating, grouping and aggregating data and analyzing.
* Tools and technologies used: python,pandas,matplotlib,pandas,seaborn,plotly
* Insights: insights and conclusions that can be drawn from the given data points are as follows:

1. Positive emphasis: users expressing positive sentiments are using words like "best," "awesome," "perfect," "amazing," "look," and "happy." this suggests that the audience finds the content enjoyable, impressive, and visually appealing. The positive emphasis indicates a high level of satisfaction and engagement with the content.

2. Negative emphasis: users expressing negative sentiments are using words like "terrible," "worst," "horrible," "boring," and "disgusting." this indicates that some users have a negative perception of the content, finding it uninteresting, unpleasant, or of low quality. It's important to address these negative feedback points and understand the reasons behind the negative sentiments to improve the content.

3. Emoji analysis: the most frequently used emojis are "😂" (36987), "😍" (33453), "❤" (31119), "🔥" (8694), "😭" (8398), "👏" (5719), "😘" (5545), "👍" (5476), "💖" (5359), and "💕" (5147). These emojis represent different emotions and reactions from the audience. The "😂" and "😍" emojis indicate humor and admiration, while "❤" and "💖" represent love and appreciation. The "🔥" emoji suggests excitement or something being trendy. These emojis reflect the audience's engagement, enjoyment, and positive reactions to the content.

Overall, these insights highlight the sentiment and emotional engagement of the audience towards the content. It's crucial to leverage positive sentiments and address negative feedback to improve the content and enhance audience satisfaction. Additionally, incorporating popular emojis can help in creating a more engaging and relatable content experience for the viewers.

* Based on the data provided, the following conclusions can be drawn:

1. Majority of the customers are happy: the analysis of positive words and emojis indicates that a significant number of users have expressed positive sentiments towards the content. The frequent use of emojis such as "funny," "love," "heart," and "outstanding" suggests that the majority of customers find the content enjoyable, lovable, and of high quality. This positive sentiment reflects a high level of customer satisfaction.

2. Emojis reflect positive reactions: the usage of emojis like "funny," "love," and "heart" indicates that the content is eliciting positive emotions and reactions from the audience. These emojis represent amusement, affection, and admiration, indicating a strong positive response to the content.

3. Content resonates with the audience: the emphasis on positive words and the frequent use of emojis associated with positive emotions suggest that the content aligns well with the audience's preferences and expectations. The content seems to entertain, inspire love, and be highly regarded by the viewers.

Based on these conclusions, it can be inferred that the content is successfully engaging and satisfying a majority of the customers, evoking positive emotions and reactions. This positive reception suggests that the content strategy is effective in resonating with the target audience and meeting their expectations.