2.1 Sorting the Data

Step 1: Copy the whole "Country" column

Step 2: Add new sheet named “Country” and set it up like the sample picture

Step 3: Paste copied column into Column A starting at A2 in the new sheet

Step 4: Back to tweetData and sort according to the country name

Step 5: Remove null countries of Country and remove “null”

Step 6: Remove all duplicates by countries

Step 7: Set up

Step 8: calculate average sentiment

=AVERAGEIFS(tweetData!K:K,tweetData!F:F,Country!A2)

Step 9: calculate number of positive, negative, neutral tweets.
=COUNTIFS(tweetData!$L:$L,C$1,tweetData!$F:$F,$A2)

=COUNTIFS(tweetData!$L:$L,D$1,tweetData!$F:$F,$A2)

=COUNTIFS(tweetData!$L:$L,E$1,tweetData!$F:$F,$A2)

Step 10: To calculate number of tweets by a specified country using COUNTIF.

=SUM(C2:E2)

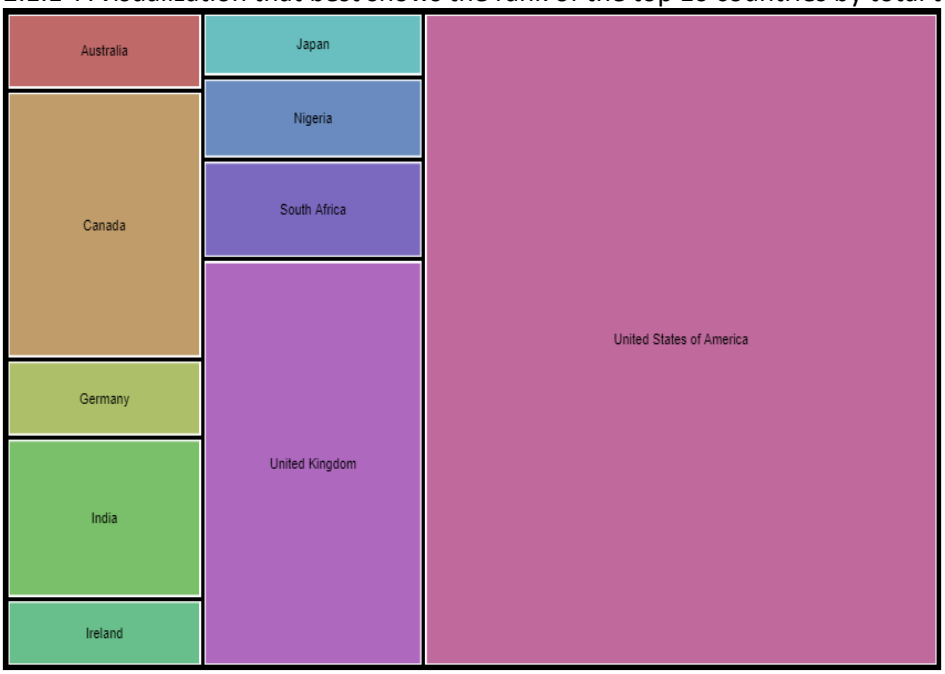
Step 11: Positive, negative, neutral proportions were calculated used the number of positive, negative, neutral tweets divided by total number of tweets.

=C2/F2

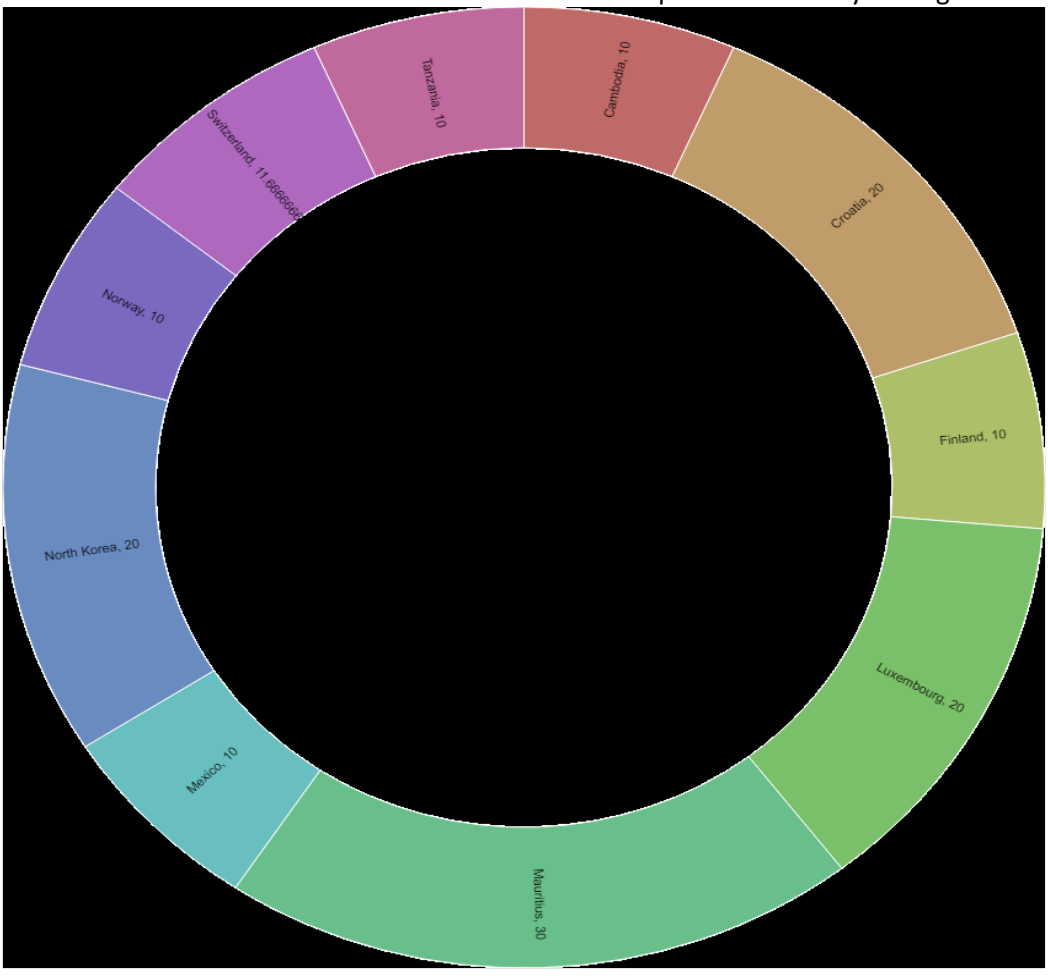
=D2/F2

=E2/F2

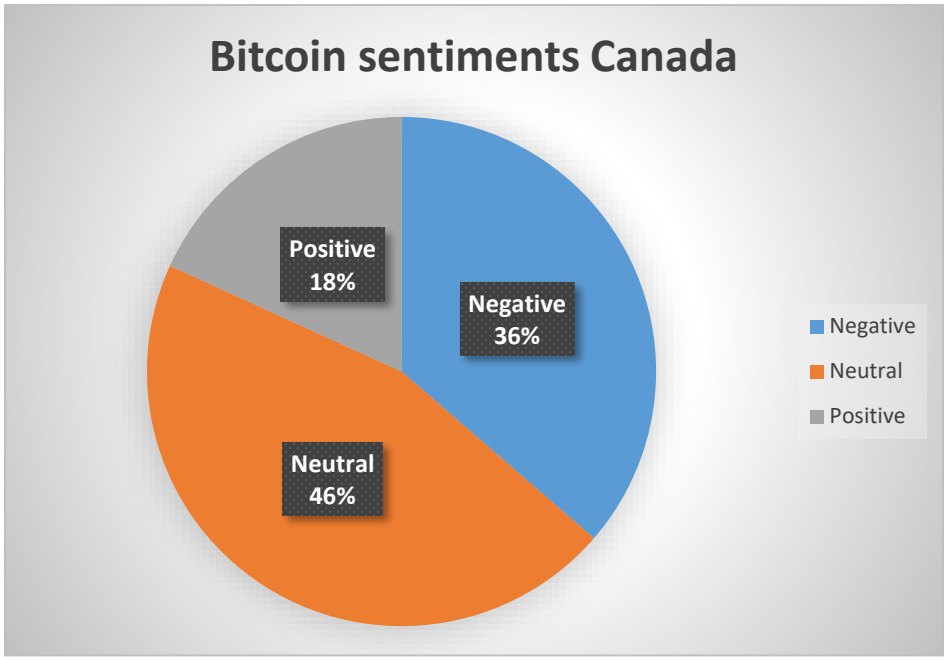
2.1.1 A visualization that best shows the rank of the top 10 countries by total tweets.



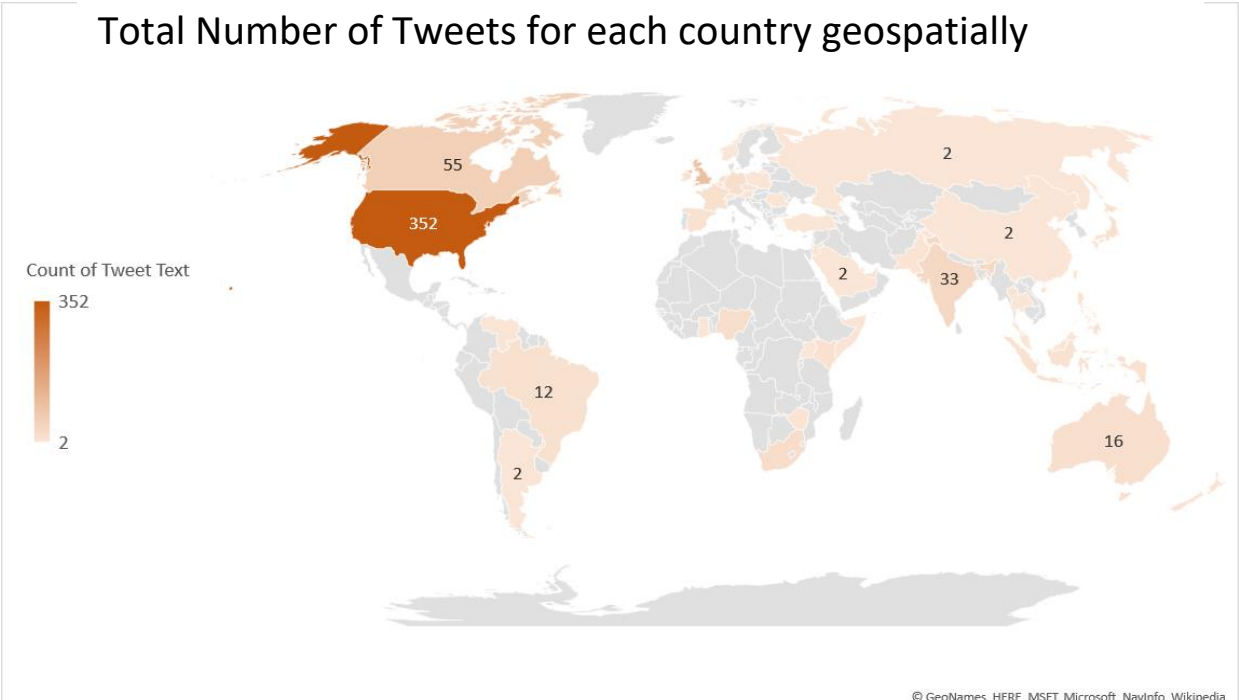
2.1.2. A visualization that best shows the rank of the top 10 countries by average sentiment.



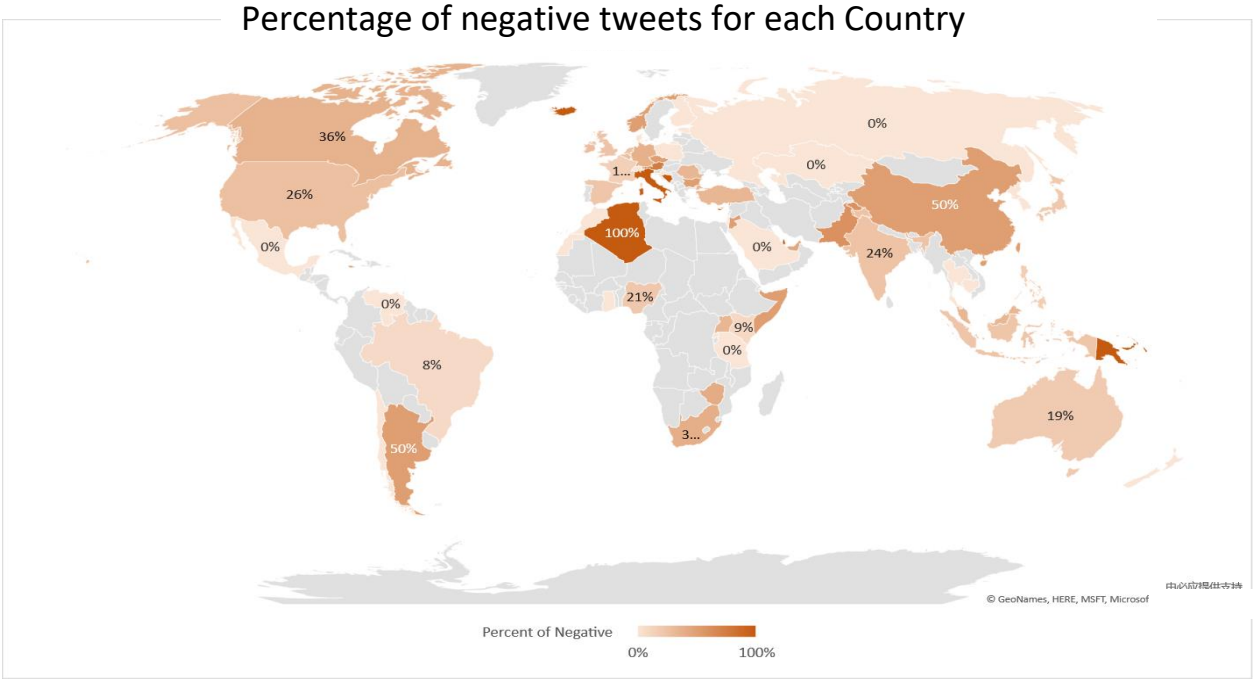
2.1.3 A visualization that best shows the percentage of positive, negative and neutral tweets for Canada (out of the total number of tweets for Canada).



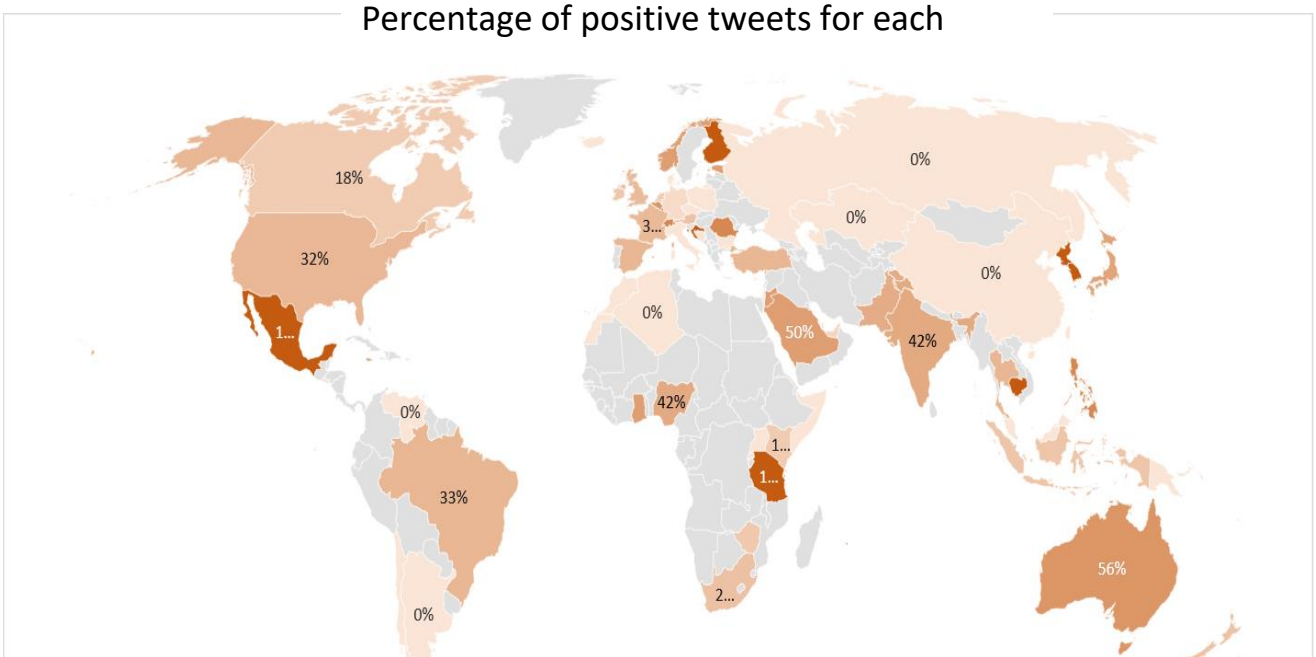
2.1.4 A visualization that best shows the total number of tweets for each country geospatially



2.1.5. A visualization that best shows the percentage of negative tweets for each country geospatially



2.1.6 A visualization that best shows the percentage of positive tweets for each country geospatially



2.2 Sorting the Data

Step 1: copy City, Province and Country column from “TweetData” to the “Hierarchy” sheet that is newly created.

Step 2: Remove duplicates by highlighting all 3 columns

Step 3: Sort City by alphabetical order and remove all rows containing null.

Step 4: Sort Province by alphabetical order and remove all rows containing null.

Step 5: calculate average sentiments

=AVERAGEIFS(tweetData!K:K,tweetData!D:D,A2)

Step 7: calculate positive, negative and neutral tweets were calculated using the following formula respectively

=COUNTIFS(tweetData!$L:$L,E$1,tweetData!$D:$D,$A2)

=COUNTIFS(tweetData!$L:$L,F$1,tweetData!$D:$D,$A2)

=COUNTIFS(tweetData!$L:$L,G$1,tweetData!$D:$D,$A2)

Step 7: calculate total number of tweets

=SUM(E2:G2)

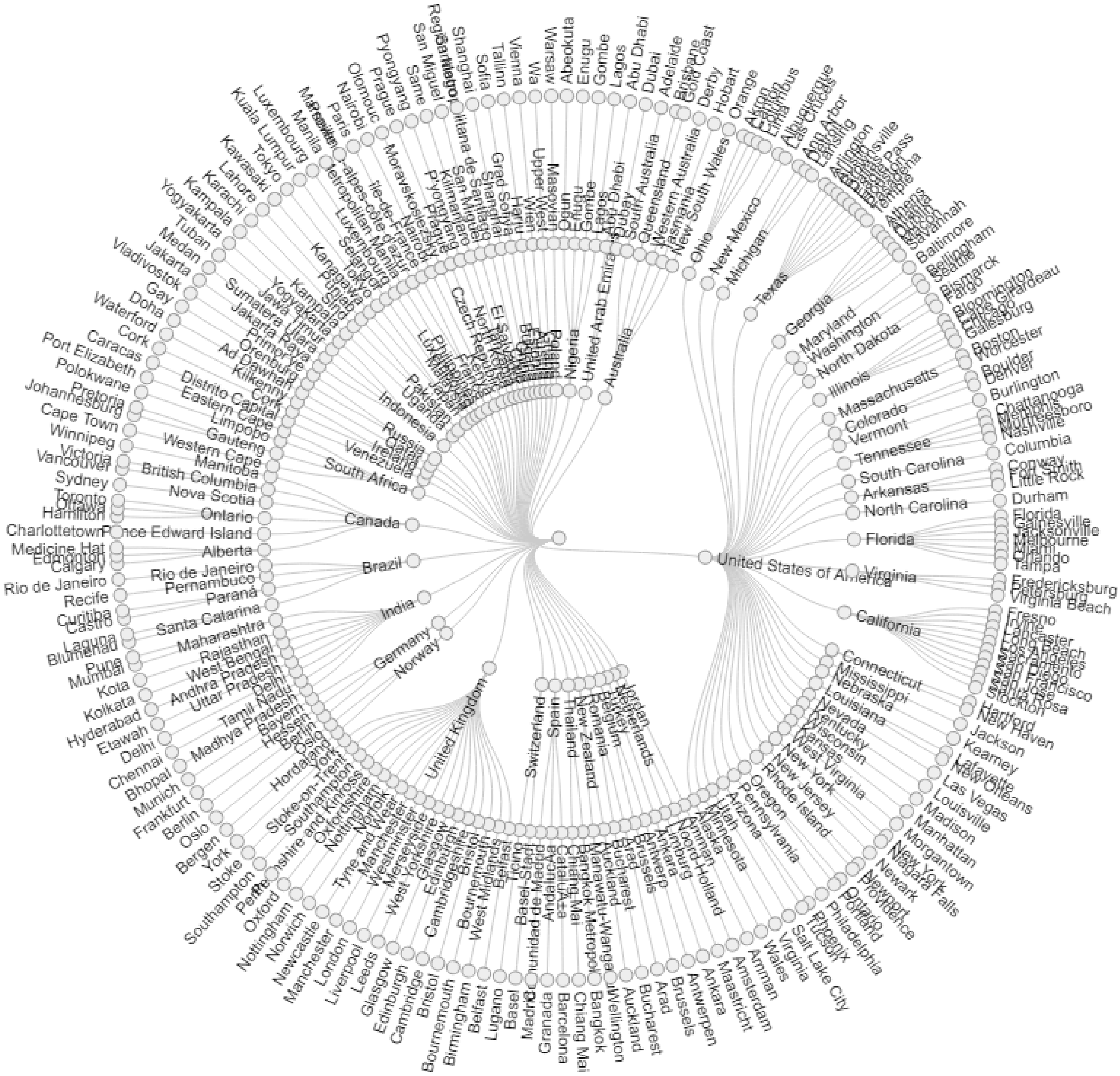
Step 8: Positive, negative, neutral proportions were calculated used the number of positive, negative, neutral tweets divided by total number of tweets. Then format them to percentage.

=E2/H2

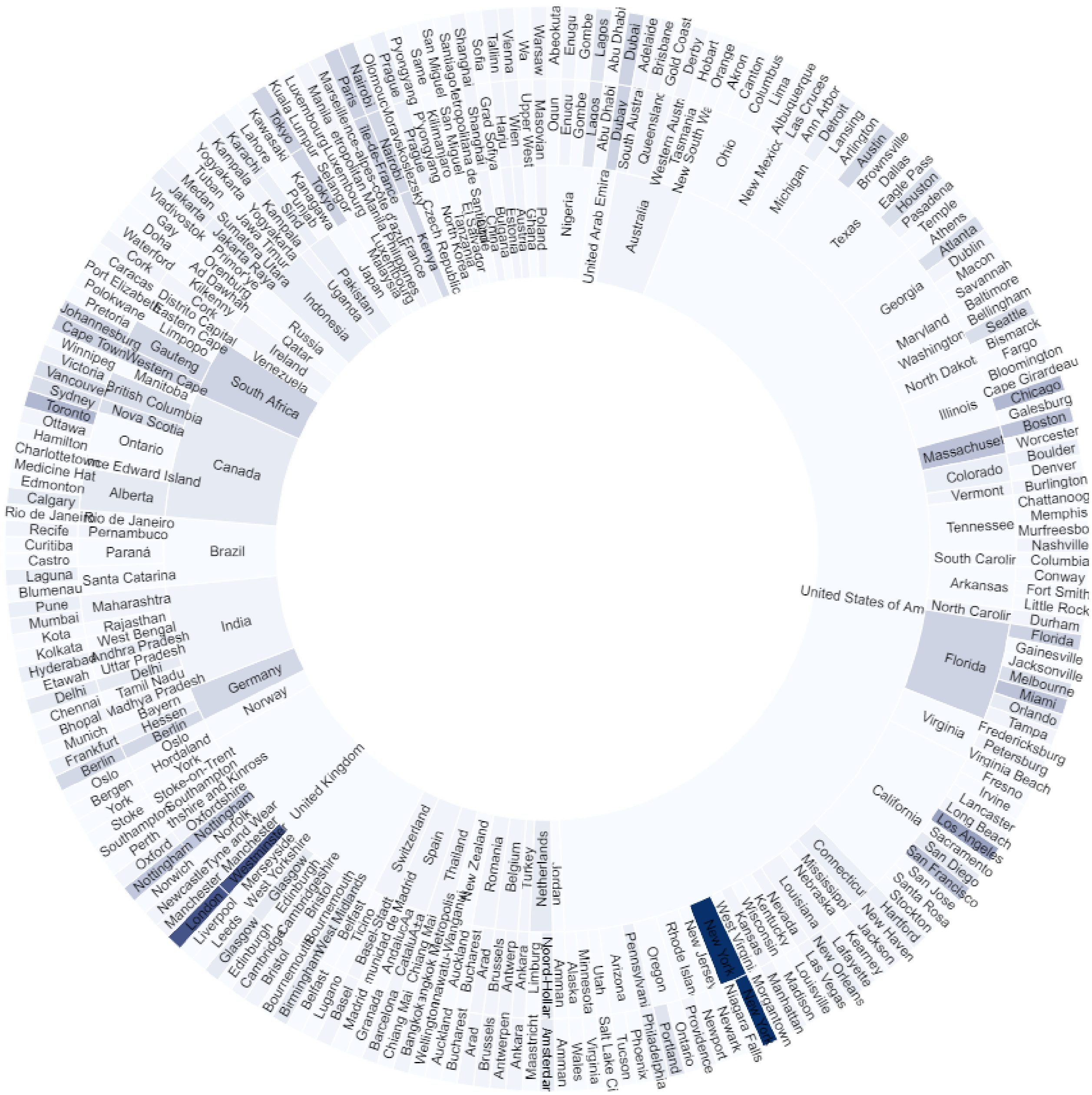
=F2/H2

=G2/H2

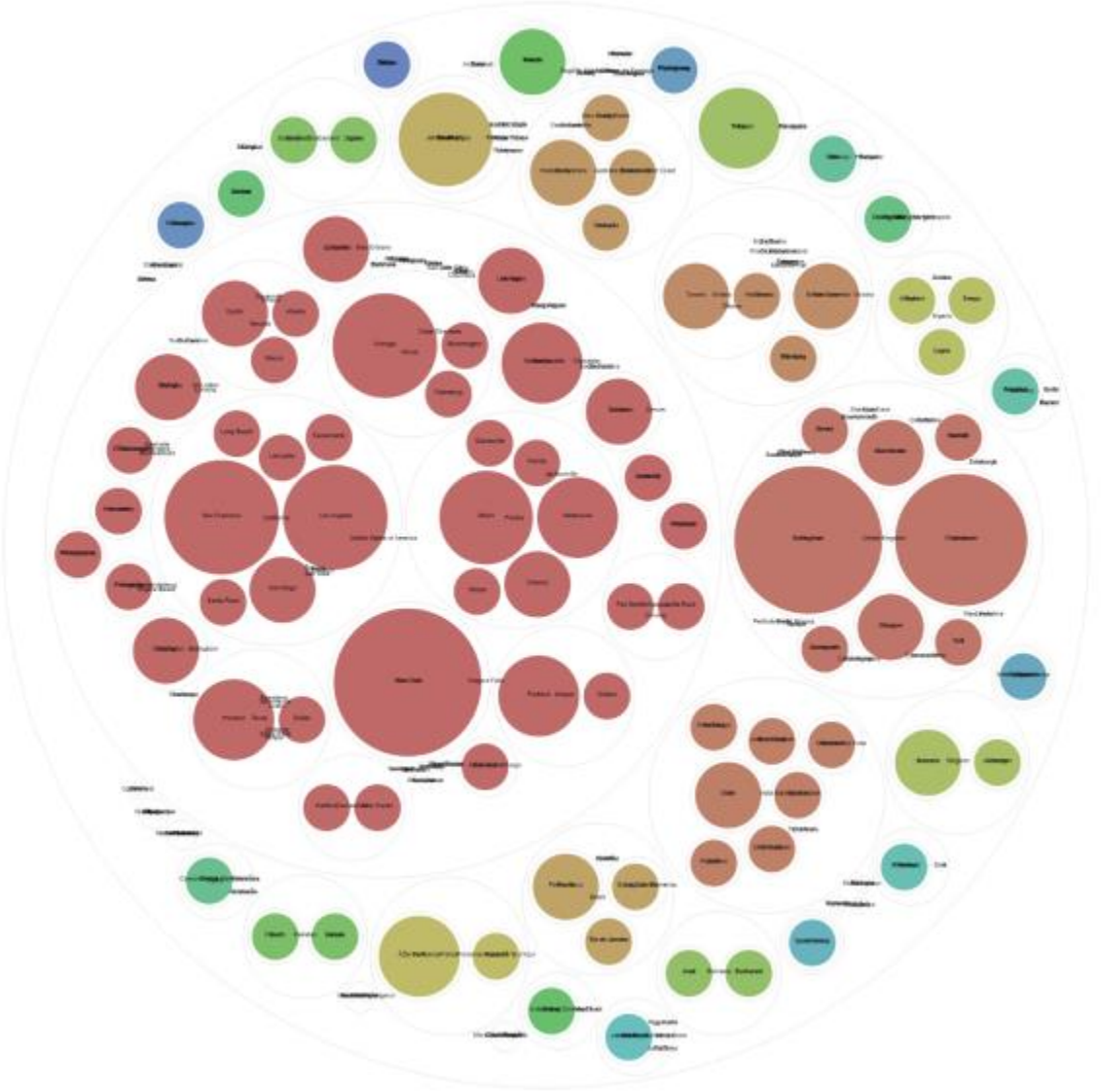
2.2.1. A visualization that shows the hierarchical relationship between cities, provinces and countries.

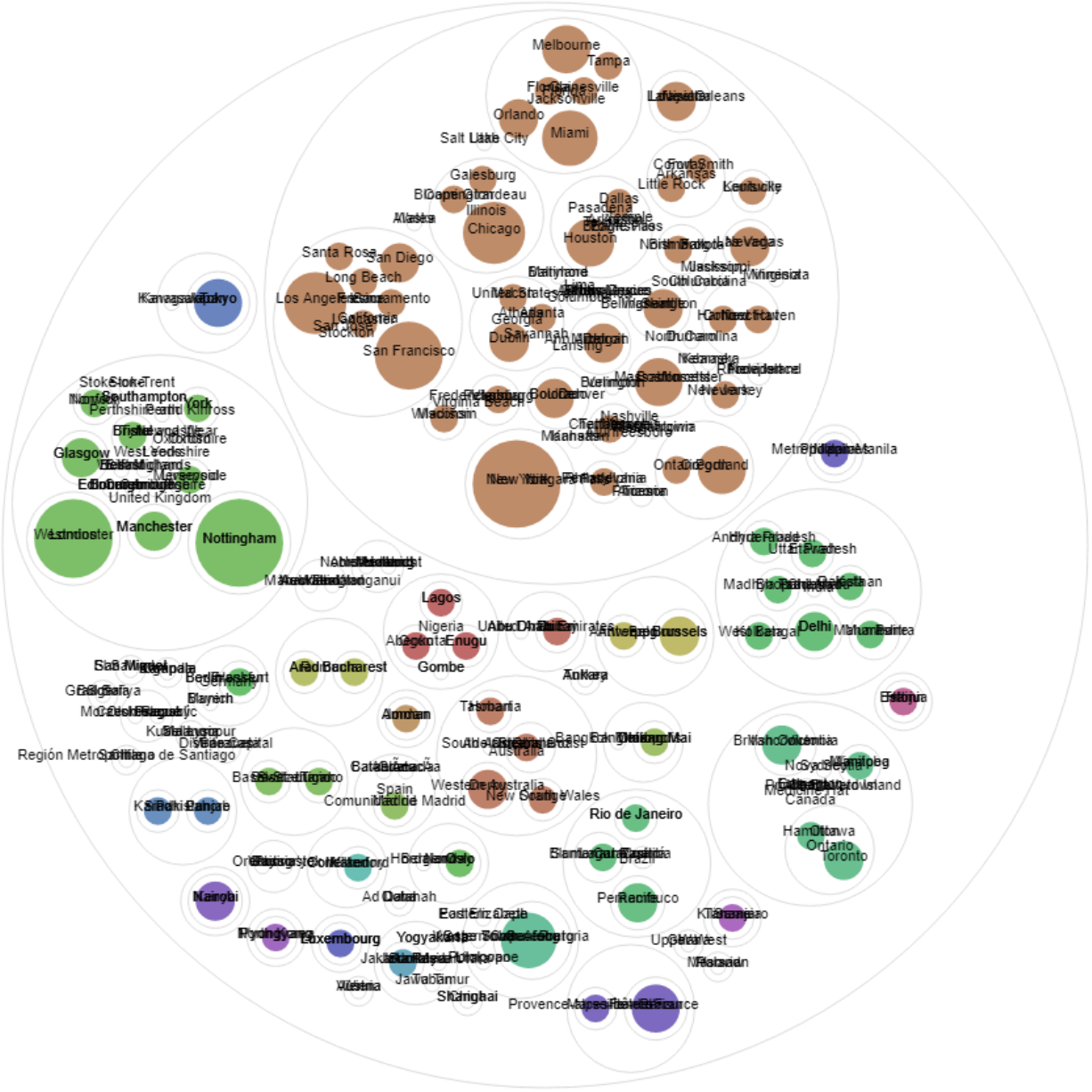


2.2.2. A visualization that shows the hierarchical relationship between cities, provinces and countries weighted by the total number of tweets.

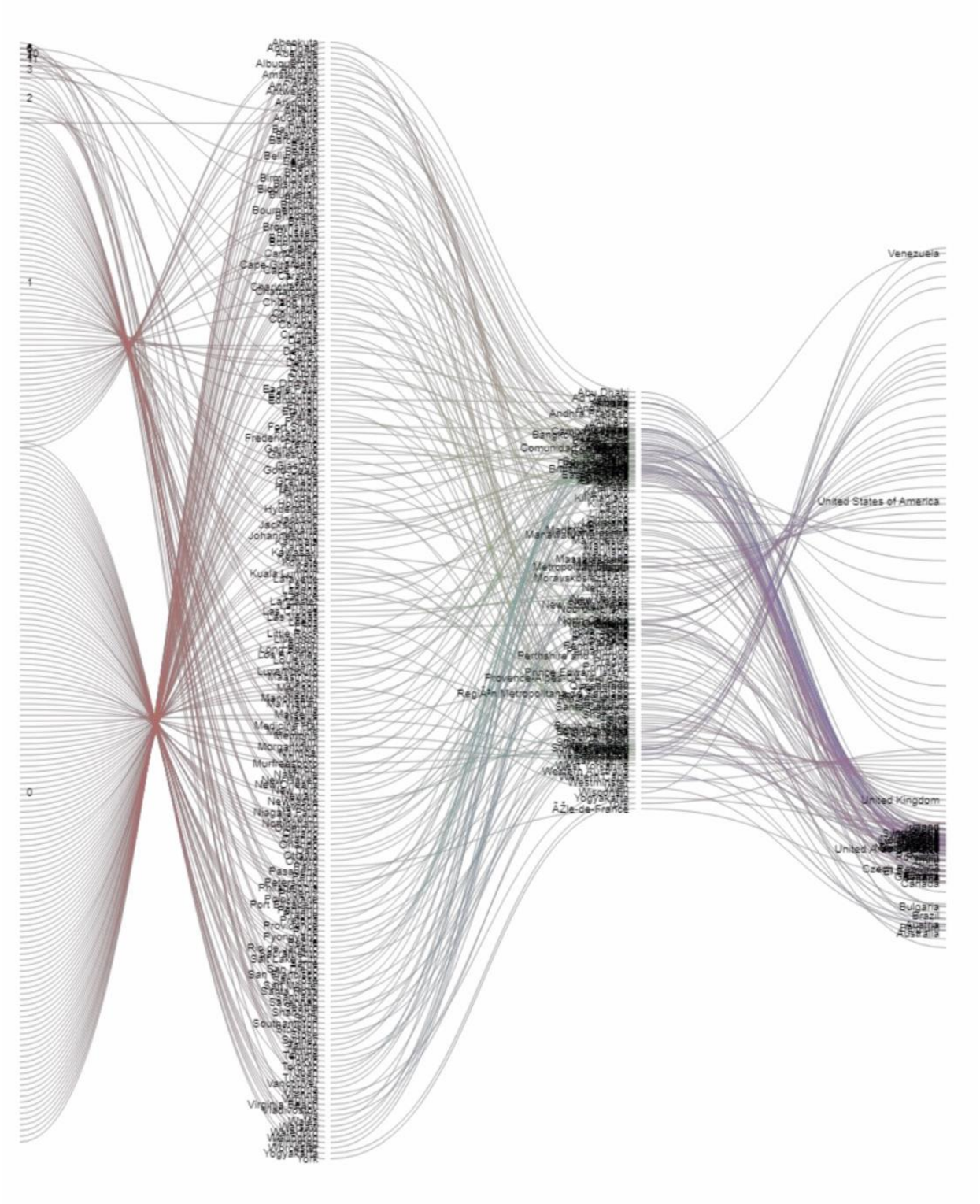


2.2.3. A visualization that shows the hierarchical relationship between cities, provinces and countries weighted by the total number of positive tweets. This visualization must use a different visualization type than the one you used for the last visualization.



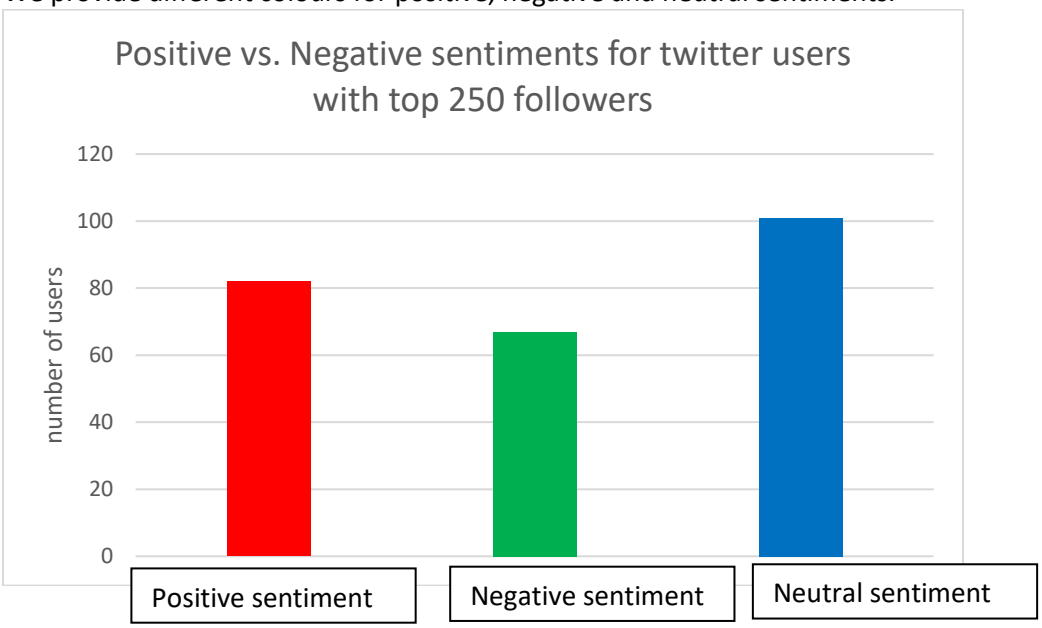


4. A visualization that shows the flow of negative tweets from cities to provinces to countries.


0
1
2
3
Venezuela
United States of America
United Kingdom

Understanding Bitcoin Tweets Around the World

Top 250 twitter followers in our sample data has quite a slit in their sentiments between positive and negative and neutral sentiments.
Principle of similarity:
We provide different colours for positive, negative and neutral sentiments.



The principle of enclosure:
By using the Circle Packing Chart, the cities from the same province are circle together to have a better view of data. Americans are the most active in expressing their view on Bitcoins.