Part I: Tag Popularity over time: Sheet 1

I cleaned the Youtube data file using a Jupyter Notebook to separate all the tags. My goal was to Count how many times a tag was used every year.

From the figure in sheet 1 we can conclude the following:

Comedy: In 2015, the tag was used only twice, it's been used 333 times more in 2017 then, 1.055 times more in 2018.

Science: The tag was used 3.8 times more in 2018 in comparison with 2017

Christmas: The tag was used twice in 2008 then, it spiked in 2017 with a count of 305 times and then went back to being only used once in 2018.

The overall trend shows that most tag occurrences have increased over the years, with some spiking in 2017 and then decreasing, others continuing the increase rate in 2018.

Part II:

Category Popularity VS Quarter (Yearly): Dashboard 1

In order to check the trend for different categories per quarter, I decided to calculate the difference in views at every quarter, every year.

From the fig. the following can be concluded:

The music category has a highly fluctuating number of views (Q1 is always higher than Q4) every year from 2002 till 2020.

The film and animation category follows the same trend as the music category but with lower magnitude.

The entertainment category started having higher fluctuations from 2010 till 2014 with Q4 higher, Q1 lower and vise versa from 2014 till 2020.

How to style category was most popular during 2010 and 2011,its popularity is gradually decreasing over the years.

Categories Most Liked and Disliked: Dashboard 1

From the fig.:

Music and entertainment categories have the highest likes ranging from 2.9 to 4.7 billion Likes.

Number of Views Per State: Dashboard 1

FL and CA have the highest number of views (rounding up to 41.7 and 55.6 billion) despite having smaller areas and hence lower population.

Most viewed, Liked channels: Sheet 3

YouTube Spotlight has the highest number of views of 14,850,205,288.00 views. Marvel entertainment has the second highest number of views of 11,179,137,807.00 views.

Part III: Channels that have the highest Sum of Error or Removed Videos: Sheet 6

Category	Channel	Number of vids removed
Film & animation	Midnight Video	21
Entertainment	Verizon	14
Sports	DaHoopSpot Productions	2