INTRODUCTION:

This report intends to find the Best videos based on various criterias, posted in the video sharing website giant – YouTube and create visualizations based on the trending videos list maintained by them.

DESCRIPTION OF DATASETS:

The dataset was sourced from the website Kaggle - https://www.kaggle.com/datasnaek/youtube-new

Multiple youtube video statistics datasets of many countries are available. This dataset includes several months (and counting) of data on daily trending YouTube videos from the years 2005 to 2012.

For the purpose of this dataset, I have chosen three different datasets of the following three countries and combined them into a single data frame:

- India
- Canada
- USA

The data also includes a category_id field, which varies between different countries. To retrieve the categories for a specific video, there are different JSON files for each country. So, I have downloaded and combined the JSON file as well, for the three countries of interest.

Pre-processing

Extensive data cleaning, wrangling, filtering, grouping were performed on the dataset to get the data in the desired format. The details of the data cleaning part are included in the Appendix section along with the code and appropriate comments explaining each step that were done.

User

I am a Data Scientist working in YouTube – the world's largest video sharing website. I have been asked to find out statistics and insights based on the list of trending videos maintained by the organization. wants to launch its first ever awards ceremony

Problem

The dataset maintained by YouTube has the attributes such as the date of the video when it was trending, title of the video, total number of views garnered, likes on the video, counts of dislikes, total number of comments on the video, category, channel that posted this video. This information is maintained separately for each country in the world.

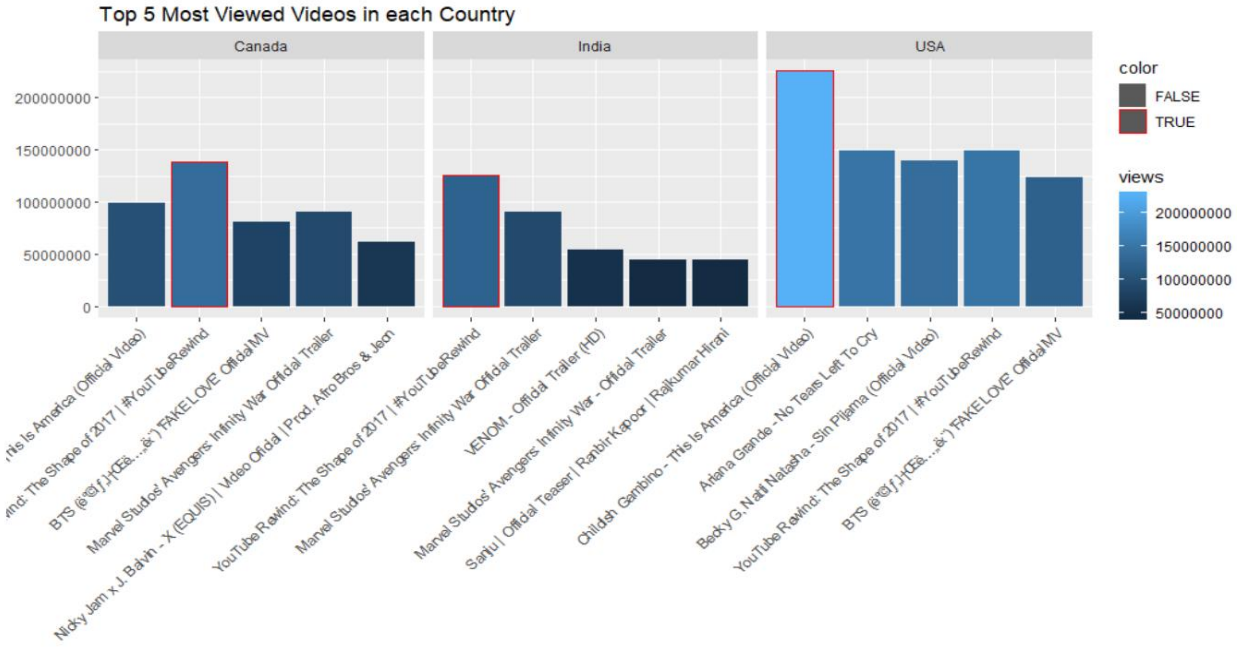
A good visualization on the dataset will help to find out the videos that were trending based on the number of views, likes, comments, the channel that was viewed the most, etc.

Scenario

The organization wants to launch its first ever awards ceremony and wants to find out the best videos till date in the countries Canada, India and USA.
Awards will be given out based on many categories such as: The most viewed video till date, most liked video till date, most commented video till date, best channel that garnered the most views, the same videos that were in trending for many days.
For the purpose of this report, I will be showing three visualizations and tables that were created by me, which were also showcased in the YouTube awards ceremony.

Visualisation:

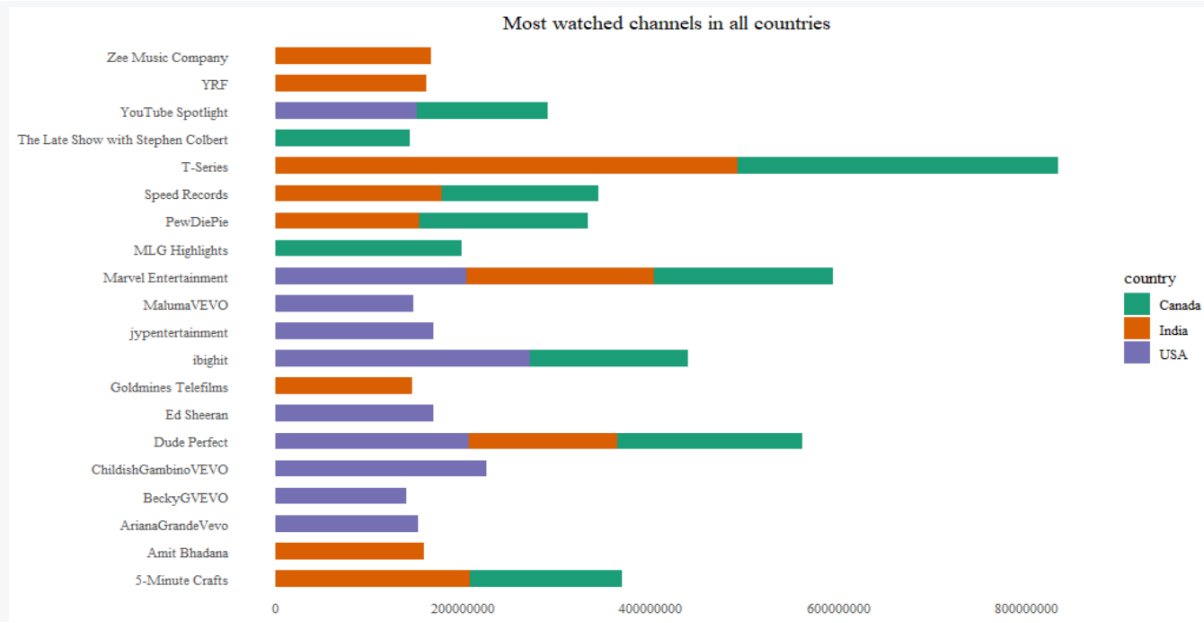
First Visualisation:



This visualisation intends to find the top 5 most viewed videos from every country and to pick the number one most viewed video among them. The total number of views of every video were taken into consideration and the top 5 most viewed videos were plotted.

As seen in the visualisation, the tallest bar graph and the red outline indicates the most viewed video of all times, from each country.
The most viewed video in USA is "**This is America"** and the award was given away to this video.
The most viewed video from both Canada and India are "**YouTube rewind, #Shape of 2017"** video. Thus, two awards were given away to the same video.

Second visualisation:



This visualisation was done by grouping channels in each country and by calculating the total sum of views, each channel received. The top 10 most viewed channels from every country were taken and formed into a same data frame.

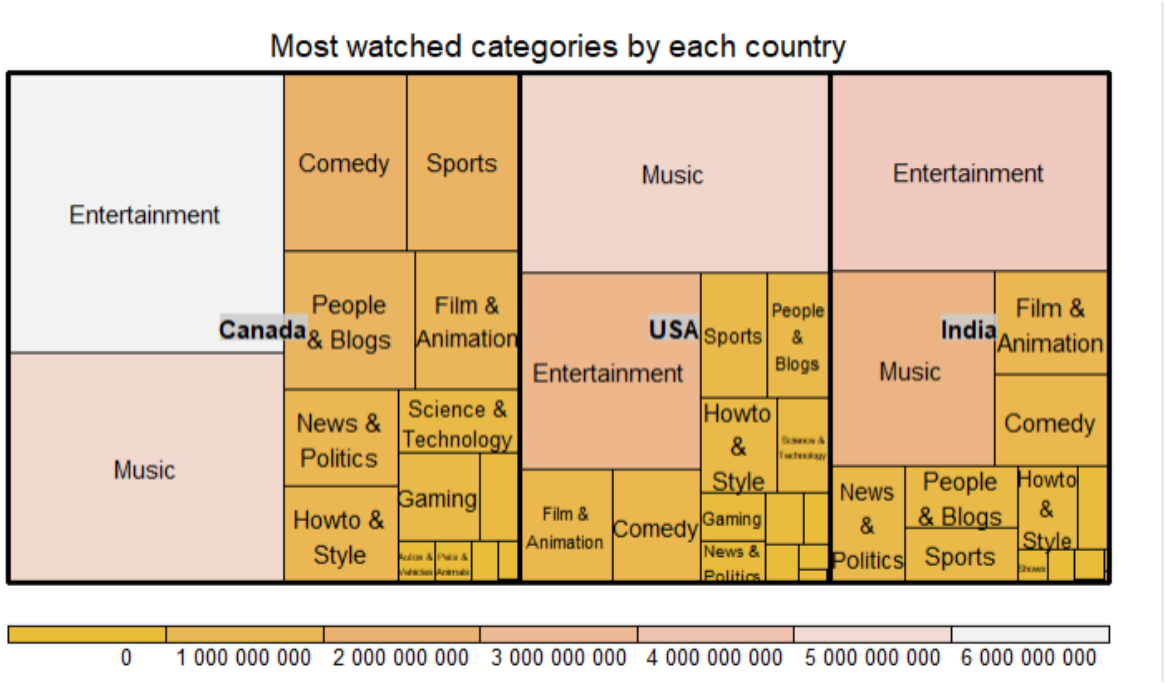
This is an useful graph, which shows the difference in countries based on the colors and by stacking the countries one upon the other, if the same channels were viewed in the other countries as well. In some cases, a channel was mostly viewed by a single country alone. That information is also included in this country.

From the plot, it is extremely clear that the channel “T-Series” garnered the most number of views, from the countries India and Canada combined, and thus bagging the title “Best Channel Award – T-series”.

Some interesting observations can be found here, that the channels “Marvel Entertainment” and “Dude Perfect” were viewed in all three countries.

Third Visualisation:

This visualisation was created as more of an effort to get an insight, to see which category of video was most viewed in each country. This was created by grouping the dataset based on the category title watched in every country and getting the total sum of the views in that category title from that country.



This is a treemap plot, which shows the most viewed category of video watched in every country. The area size and color of every category is to denote the number of views they receive.

Based on the color and size, we can clearly deduct that “Entertainment” in Canada, is the most viewed category of all. It is the only category with white color, indicating its significance very easily.

In USA, the category “Music” is most watched.
In India too, the category “Entertainment” is most watched.

General Insights:

Table with most likes and comments in Canada:

TITLE	CHANNEL TITLE	LIKES	COMMENTS
BTS (ë°©íƒ„ì†Œë…„ë‹¨) 'FAKE LOVE' Official MV	ibighit	5053338	1114800
Childish Gambino - This Is America (Official Video)	ChildishGambinoVEVO	3037318	319502
YouTube Rewind: The Shape of 2017 | #YouTubeRewind	YouTube Spotlight	3014479	817582
Marvel Studios' Avengers: Infinity War Official Trailer	Marvel Entertainment	2606665	347982
BTS (ë°©íƒ„ì†Œë…„ë‹¨) 'MIC Drop (Steve Aoki Remix)' Official MV	ibighit	2542863	519092
Drake - Godâ€™s Plan	DrakeVEVO	2469057	158262
BTS (ë°©íƒ„ì†Œë…„ë‹¨) LOVE YOURSELF è¼‰ Tear 'Singularity' Comeback Trailer	ibighit	2407419	340125
j-hope 'Daydream (ë°±ì¼ëª½)' MV	ibighit	2392594	437036
Ariana Grande - No Tears Left To Cry	ArianaGrandeVevo	2195120	192685
Maroon 5 - Girls Like You ft. Cardi B	Maroon5VEVO	2178332	128810
BTS (ë°©íƒ„ì†Œë…„ë‹¨) 'FAKE LOVE' Official MV	ibighit	5053338	1114800
YouTube Rewind: The Shape of 2017 | #YouTubeRewind	YouTube Spotlight	3014479	817582
BTS (ë°©íƒ„ì†Œë…„ë‹¨) 'MIC Drop (Steve Aoki Remix)' Official MV	ibighit	2542863	519092
CHâº Y NGAY Ã! | RUN NOW | SÆ N TÃ™NG M-TP | Official Music Video	SÆ¡n TÃ¹ng M-TP Official	827026	445251
j-hope 'Daydream (ë°±ì¼ëª½)' MV	ibighit	2392594	437036
Melting Every Lipstick From Sephora Together	Safiya Nygaard	335949	349112
Marvel Studios' Avengers: Infinity War Official Trailer	Marvel Entertainment	2606665	347982
BTS (ë°©íƒ„ì†Œë…„ë‹¨) LOVE YOURSELF è¼‰ Tear 'Singularity' Comeback Trailer	ibighit	2407419	340125
Childish Gambino - This Is America (Official Video)	ChildishGambinoVEVO	3037318	319502
we broke up	David Dobrik	1967910	311525

Table with most likes and comments in India:

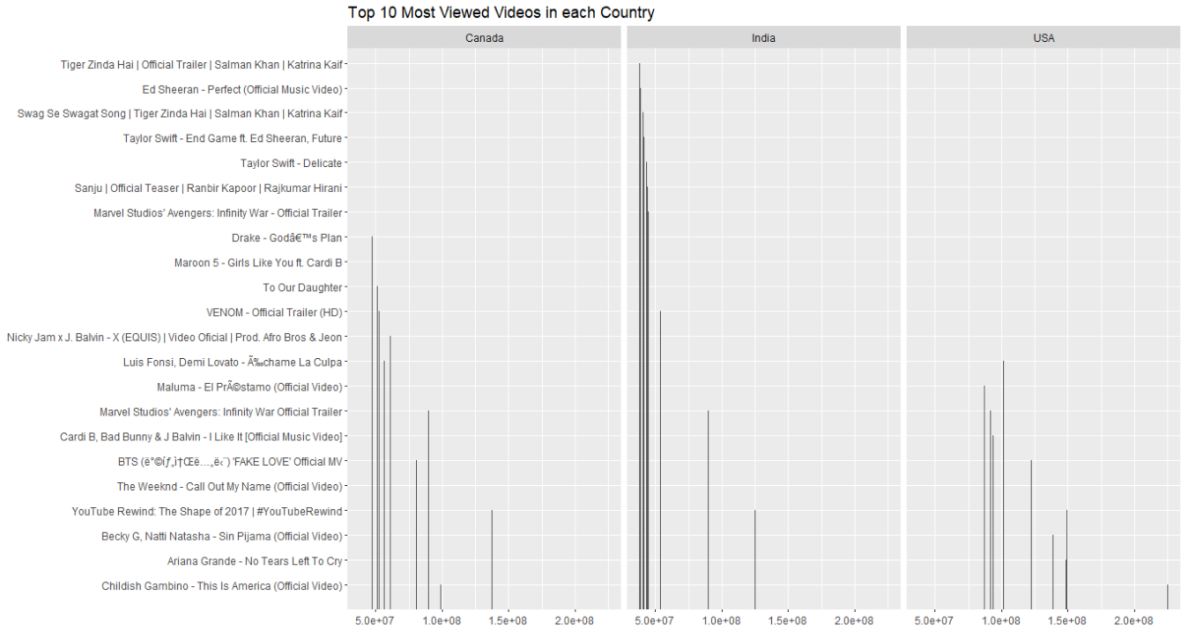
TITLE	CHANNEL TITLE	LIKES	COMMENTS
YouTube Rewind: The Shape of 2017 | #YouTubeRewind	YouTube Spotlight	2912710	807558
Marvel Studios' Avengers: Infinity War Official Trailer	Marvel Entertainment	2606665	347982
Taylor Swift - End Game ft. Ed Sheeran, Future	TaylorSwiftVEVO	1804377	146917
Ed Sheeran - Perfect (Official Music Video)	Ed Sheeran	1[illegible]	90352
Taylor Swift - Delicate	TaylorSwiftVEVO	1490756	148548
Marvel Studios' Avengers: Infinity War - Official Trailer	Marvel Entertainment	1404997	186005
VENOM - Official Trailer (HD)	Sony Pictures Entertainment	1256439	135405
Selena Gomez - Back To You	SelenaGomezVEVO	1101522	64156
Ed Sheeran - Happier (Official Video)	Ed Sheeran	1095[illegible]	58948
BB Ki Vines- | The Sacrifice |	BB Ki Vines	1084173	125740
YouTube Rewind: The Shape of 2017 | #YouTubeRewind	YouTube Spotlight	2912710	807558
OnePlus 6 Top Features and GIVEAWAY ðŸ™¥- OnePlus 6 Avengers Edition Giveaway!!ðŸ™¥	Technical Guruji	370530	382685
Samsung Galaxy J6 Unboxing and Giveaway ðŸ™¥ðŸ™¥ðŸ™¥	Technical Guruji	402778	377912
Marvel Studios' Avengers: Infinity War Official Trailer	Marvel Entertainment	2606665	347982
Samsung Galaxy S9 Top Features and Tips Tricks - Galaxy S9 Mega Giveaway ðŸ™¥ðŸ™¥ðŸ™¥	Technical Guruji	252602	295139
Xiaomi Redmi Note 5 Pro Unboxing and Giveaway ðŸ™¥ðŸ™¥ðŸ™¥	Technical Guruji	237090	192229
Marvel Studios' Avengers: Infinity War - Official Trailer	Marvel Entertainment	1404997	186005
OnePlus 5T Star Wars Limited Edition Unboxing and First Look *GIVEAWAY*	Technical Guruji	173149	153049
Logan Paul - SANTA DISS TRACK (Official Music Video)	Logan Paul Vlogs	882[illegible]	150856
Taylor Swift - Delicate	TaylorSwiftVEVO	1490756	148548

Table with most likes and comments in USA:

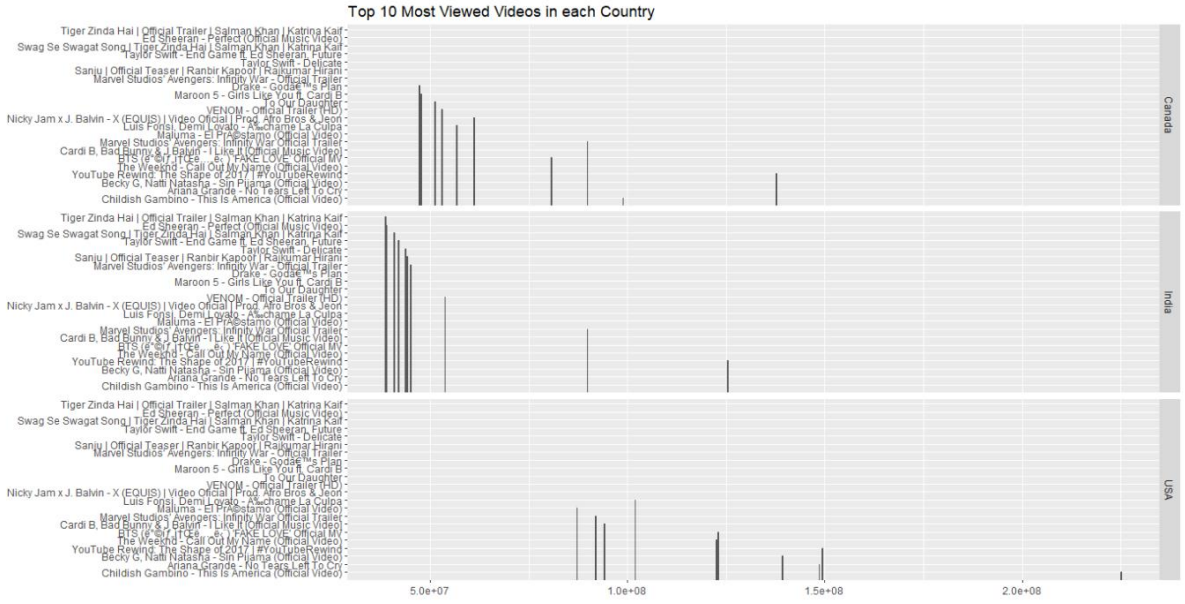
TITLE	CHANNEL TITLE	LIKES	COMMENTS
BTS (ë°©íƒ„ì†Œë…„ë‹¨) 'FAKE LOVE' Official MV	ibighit	5613827	1228655
Childish Gambino - This Is America (Official Video)	ChildishGambinoVEVO	5023450	517232
Ariana Grande - No Tears Left To Cry	ArianaGrandeVevo	3094021	242[illegible]39
YouTube Rewind: The Shape of 2017 | #YouTubeRewind	YouTube Spotlight	3093544	810698
BTS (ë°©íƒ„ì†Œë…„ë‹¨) 'MIC Drop (Steve Aoki Remix)' Official MV	ibighit	2729292	546100
BTS (ë°©íƒ„ì†Œë…„ë‹¨) LOVE YOURSELF è¼‰ Tear 'Singularity' Comeback Trailer	ibighit	2700800	371864
j-hope 'Daydream (ë°±ì¼ëª½)' MV	ibighit	2672431	477233
Marvel Studios' Avengers: Infinity War Official Trailer	Marvel Entertainment	2625661	358458
Maroon 5 - Girls Like You ft. Cardi B	Maroon5VEVO	2488565	142410
Luis Fonsi, Demi Lovato - Ã‰chame La Culpa	LuisFonsiVEVO	2376636	134228
So Sorry.	Logan Paul Vlogs	1402578	1361580
BTS (ë°©íƒ„ì†Œë…„ë‹¨) 'FAKE LOVE' Official MV	ibighit	5613827	1228655
YouTube Rewind: The Shape of 2017 | #YouTubeRewind	YouTube Spotlight	3093544	810698
Suicide: Be Here Tomorrow.	Logan Paul Vlogs	1988746	668130
BTS (ë°©íƒ„ì†Œë…„ë‹¨) 'MIC Drop (Steve Aoki Remix)' Official MV	ibighit	2729292	546100
Childish Gambino - This Is America (Official Video)	ChildishGambinoVEVO	5023450	517232
j-hope 'Daydream (ë°±ì¼ëª½)' MV	ibighit	2672431	477233
LOGAN PAUL IS BACK!	Logan Paul Vlogs	1216340	436698
Melting Every Lipstick From Sephora Together	Safiya Nygaard	402569[illegible]	38[illegible]762
BTS (ë°©íƒ„ì†Œë…„ë‹¨) LOVE YOURSELF è¼‰ Tear 'Singularity' Comeback Trailer	ibighit	2700800	371864

Previous Iterations of first visualisation:

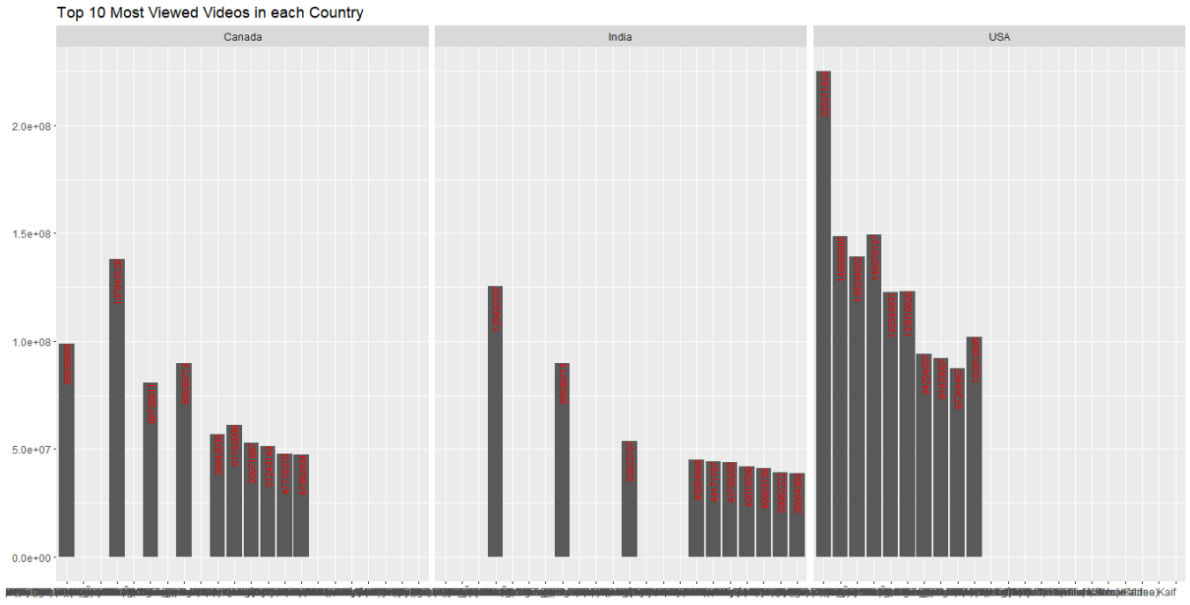
1)



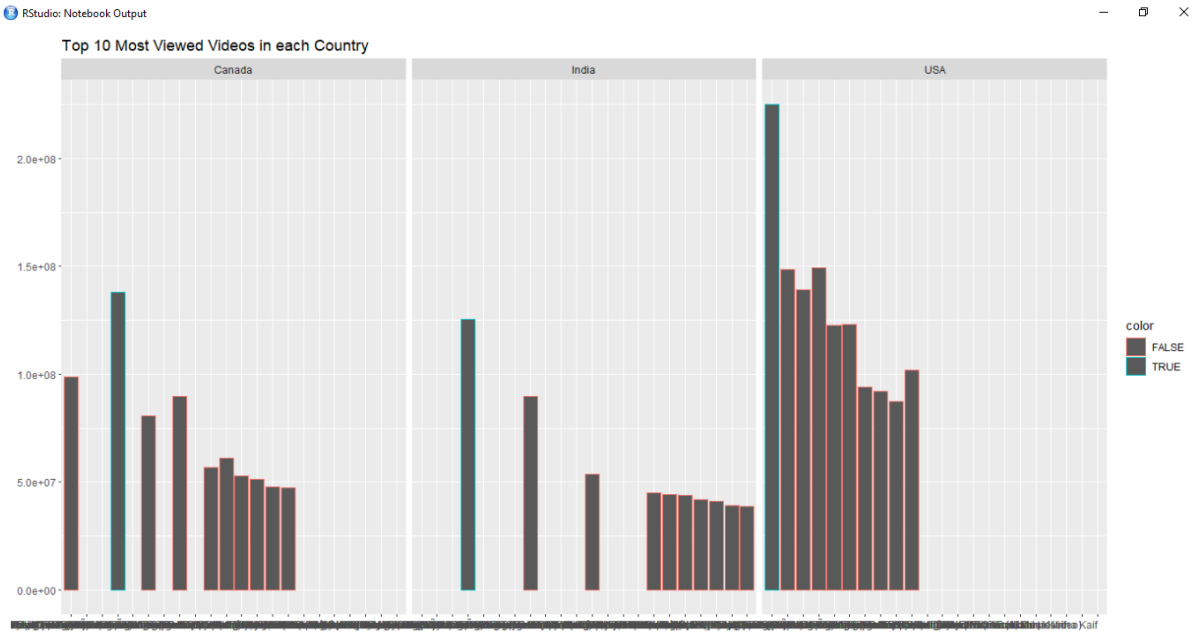
2)



3)

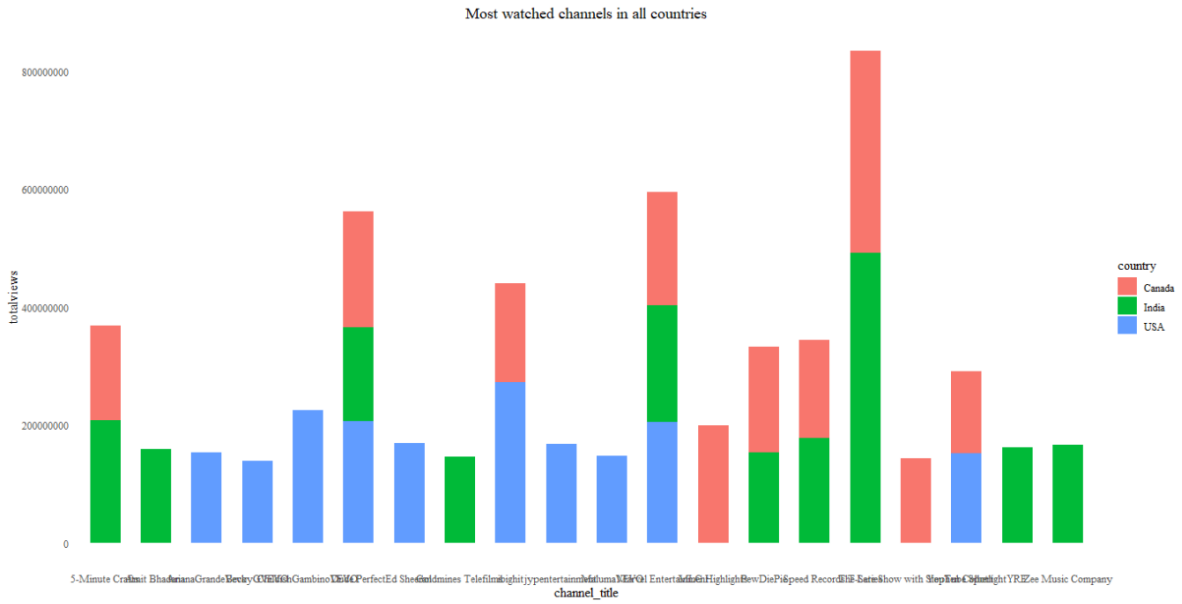

Top 10 Most Viewed Videos in each Country
Canada
India
USA
2.0e+08
1.5e+08
1.0e+08
5.0e+07
0.0e+00

4)


RStudio: Notebook Output
Top 10 Most Viewed Videos in each Country
Canada
India
USA
2.0e+08
1.5e+08
1.0e+08
5.0e+07
0.0e+00
color
FALSE
TRUE

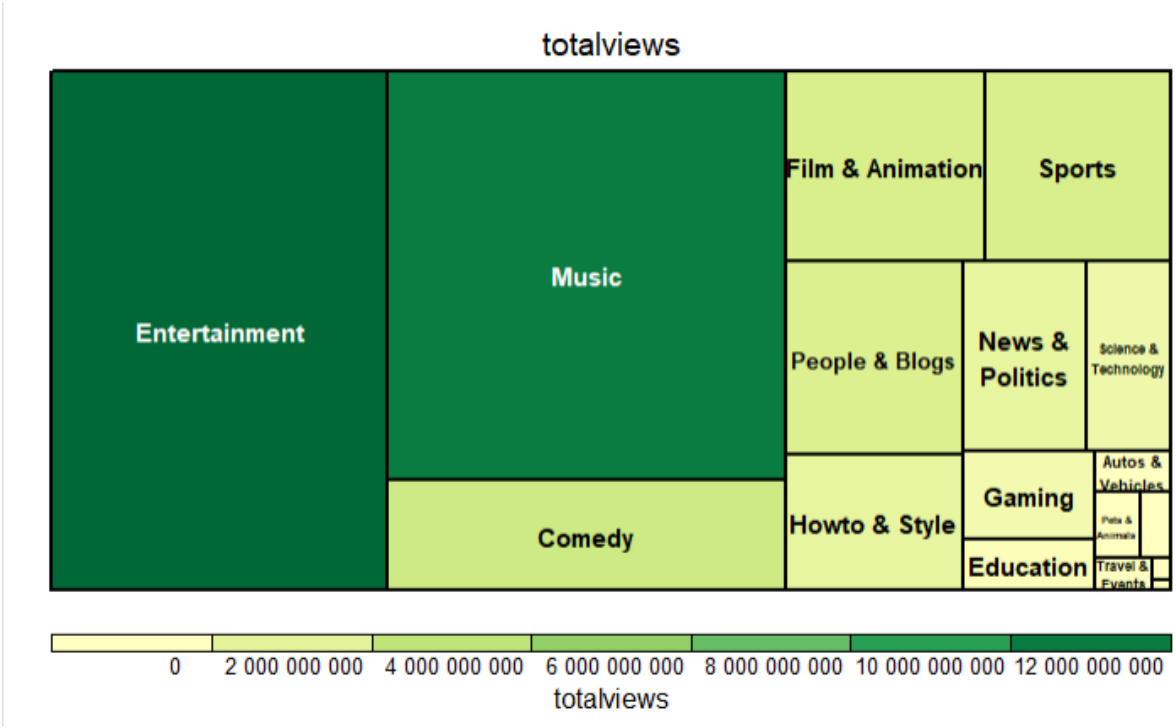
Previous Iterations of second visualisation:

1)

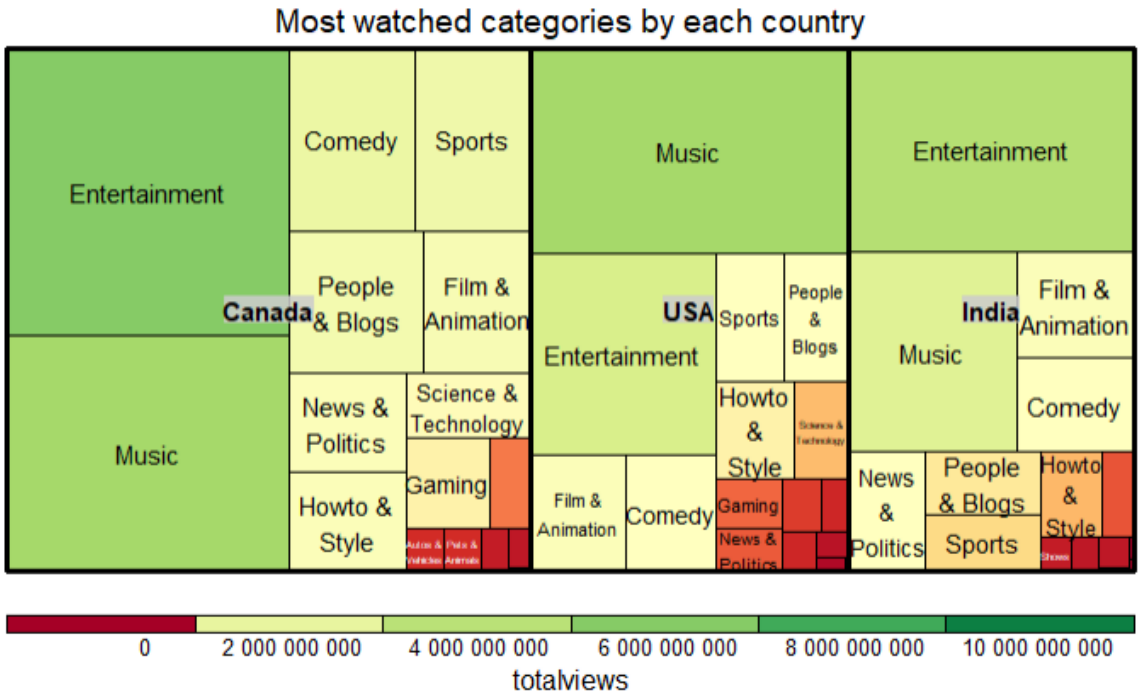


Previous Iterations of third visualisation:

1)



2)



Appendices with Code, Comments:

Libraries used:

```
library(ggthemes)
library(treemap)
library(rjson)
library(jsonlite)
library(formattable)
library(sqldf)
library(data.table)
library(pastecs)
library(dplyr)
library(DT)
library(ggplot2)
library(plotrix)
library(tidytext)
library(stringr)
library(tm)
```

Pre-processing data and cleaning, wrangling:

```
#Loading the dataset
canadaData <- read.csv("CAvideos.csv",header = TRUE)
usaData <- read.csv("USvideos.csv",header = TRUE)
indiaData <- read.csv("INvideos.csv",header = TRUE)

#Checking for NA values
sum(is.na(canadaData))
sum(is.na(usaData))
sum(is.na(indiaData))
#No NA values

#Getting the Category ID and Category title from a separate json file
CanadaCategory <- fromJSON("CA_category_id.json", flatten = TRUE)
CanadaCategorydf <- as.data.frame(CanadaCategory)
CanadaCategorydf <- CanadaCategorydf[,c("items.id","items.snippet.title")]


USCategory <- fromJSON("US_category_id.json", flatten = TRUE)
USCategorydf <- as.data.frame(USCategory)
USCategorydf <- USCategorydf[,c("items.id","items.snippet.title")]


IndiaCategory <- fromJSON("India_cat_id.json", flatten = TRUE)
IndiaCategorydf <- as.data.frame(IndiaCategory)
IndiaCategorydf <- IndiaCategorydf[,c("items.id","items.snippet.title")]

#Renaming category id and category title
colnames(CanadaCategorydf)[1] <- "category_id"
colnames(USCategorydf)[1] <- "category_id"
colnames(IndiaCategorydf)[1] <- "category_id"

colnames(CanadaCategorydf)[2] <- "category_title"
colnames(USCategorydf)[2] <- "category_title"
colnames(IndiaCategorydf)[2] <- "category_title"
```

```
#Converting category id from the json file to integer format
CanadaCategorydf$category_id <- as.integer(CanadaCategorydf$category_id)
IndiaCategorydf$category_id <- as.integer(IndiaCategorydf$category_id)
USCategorydf$category_id <- as.integer(USCategorydf$category_id)

#Joining category title from the json file to the main data set based on category
id
Canada <- left_join(canadaData, CanadaCategorydf, by="category_id")
USA <- left_join(usaData, USCategorydf, by="category_id")
India <- left_join(indiaData, IndiaCategorydf, by="category_id")

#Checking for NA values after combining the two data frames. There are NA
values in two data frames.
sum(is.na(Canada)) #69 NA values
sum(is.na(USA)) #0
sum(is.na(India)) #41 NA values

#Removing rows that have NA values, because we don't have the information
of category title for that category id and we cannot replace it with any other
values, because these are absolute values.
Canada <- na.omit(Canada,Canada$category_title)
India <- na.omit(India,India$category_title)

#Removing rows that have comments disabled, ratings disabled and videos
that were removed
Canada <-
subset(Canada,(toupper(Canada$video_error_or_removed)=="FALSE" &
toupper(Canada$ratings_disabled) == "FALSE" &
toupper(Canada$comments_disabled) == "FALSE"))

#ADDING A NEW COLUMN COUNTRY WITH VALUE CANADA
Canada$country<-"Canada"
```

```
India <- subset(India,(toupper(India$video_error_or_removed)=="FALSE" &
toupper(India$ratings_disabled) == "FALSE" &
toupper(India$comments_disabled) == "FALSE"))

#ADDING A NEW COLUMN COUNTRY WITH VALUE INDIA
India$country <-"India"

USA <- subset(USA,(toupper(USA$video_error_or_removed)=="FALSE" &
toupper(USA$ratings_disabled) == "FALSE" &
toupper(USA$comments_disabled) == "FALSE"))

#ADDING A NEW COLUMN COUNTRY WITH VALUE USA
USA$country <- "USA"

#Getting the unique video sequence id, title based on the latest trending
date/maximum number of views. The same video's id sometimes appears
more than once, because it was trending on more than one day.
CanadaViews <- arrange(Canada, desc(Canada$views))
USAViews <- arrange(USA, desc(USA$views))
IndiaViews <- arrange(India, desc(India$views))

UniqueCanadaViews <- CanadaViews[match(unique(CanadaViews$video_id),
CanadaViews$video_id),]

UniqueUSAViews <- USAViews[match(unique(USAViews$video_id),
USAViews$video_id),]

UniqueIndiaViews <- IndiaViews[match(unique(IndiaViews$video_id),
IndiaViews$video_id),]



#TOP 10 VIEWS, LIKES, COMMENTS OF CANADA
CanadaLikes <- arrange(UniqueCanadaViews, desc(UniqueCanadaViews$likes))
```

```
CanadaComments <- arrange(UniqueCanadaViews,
desc(UniqueCanadaViews$comment_count))


UniqueCanadaViews1 <- head(UniqueCanadaViews,10)
TopCanadaLikes<- head(CanadaLikes,10)
TopCanadaComments<-head(CanadaComments,10)

#Creating a dataset by combining top likes and comments
TopVideosCanada <-
as.data.frame(rbind(TopCanadaLikes,TopCanadaComments))

#TOP 10 OF USA
USALikes <- arrange(UniqueUSAViews, desc(UniqueUSAViews$likes))
USAComments <- arrange(UniqueUSAViews,
desc(UniqueUSAViews$comment_count))

UniqueUSAViews1 <- head(UniqueUSAViews,10)
UniqueUSALikes1<- head(USALikes,10)
UniqueUSAComments1<-head(USAComments,10)

TopVideosUSA <- rbind(UniqueUSALikes1,UniqueUSAComments1)

TopVideosUSATable = TopVideosUSA[, c(3, 4, 9, 11)]
colnames(TopVideosUSATable) = c("TITLE", "CHANNEL
TITLE","LIKES","COMMENTS")

#Creating a table with all the views, comments and likes and varying the
colours based on their counts
widgetUSA = formattable(TopVideosUSATable, list(
        LIKES = color_bar('red'),
        COMMENTS = color_bar('darkblue')
))
```

```
#TOP 10 OF INDIA
IndiaLikes <- arrange(UniqueIndiaViews, desc(UniqueIndiaViews$likes))
IndiaComments <- arrange(UniqueIndiaViews,
desc(UniqueIndiaViews$comment_count))



UniqueIndiaViews1 <- head(UniqueIndiaViews,10)
UniqueIndiaLikes1<- head(IndiaLikes,10)
UniqueIndiaComments1<-head(IndiaComments,10)

TopVideosIndia <- rbind(UniqueIndiaLikes1,UniqueIndiaComments1)

TopVideosIndiaTable = TopVideosIndia[, c(3, 4, 9, 11)]
colnames(TopVideosIndiaTable) = c("TITLE", "CHANNEL
TITLE","LIKES","COMMENTS")

#Creating a table with all the views, comments and likes and varying the
colours based on their counts
widgetIndia = formattable(TopVideosIndiaTable, list(
        LIKES = color_bar('green'),
        COMMENTS = color_bar('orange')
))

#This is done so that scientific notation representation will not appear
options(scipen = 999)
```

Code for visualisation 1 with iterations:

```
#COMBINING ALL THE RECORDS OF THE MOST VIEWED VIDEOS FROM EVERY
COUNTRY
TopViewedVideos<-
rbind(head(UniqueUSAViews1,5),head(UniqueCanadaViews1,5),head(UniqueIn
diaViews1,5))
```

```
#This is done so that, the most viewed video and its title will be highlighted with red colour separately
topViewed <- TopViewedVideos %>%
  group_by(country) %>%
  mutate(color = max(views) == views)

#First visualization
ggplot(topViewed, aes(reorder(title,-views),views,fill=views))+
facet_grid(~country,scales = "free")+ geom_bar(stat="identity",aes(color = color))+theme(axis.text.x = element_text(angle = 45,hjust = 1))
+scale_color_manual(values = c(NA, "red"))+ labs(title="Top 5 Most Viewed Videos in each Country")+xlab(NULL)+ylab(NULL)
```

#previous iterations

```
#1
ggplot(topViewed, aes(y=reorder(title,-views),x=views))+
facet_grid(country~.)+ geom_bar(stat="identity") + labs(title="Top 10 Most Viewed Videos in each Country")

#2
ggplot(topViewed, aes(y=reorder(title,-views),x=views))+ facet_grid(~country)+
geom_bar(stat="identity") + labs(title="Top 10 Most Viewed Videos in each Country")+xlab(NULL)+ylab(NULL)

#3
ggplot(topViewed, aes(reorder(title,-views),views))+ facet_grid(~country)+
geom_bar(stat="identity")+theme(axis.text.x = element_text(hjust = 1)) +
labs(title="Top 10 Most Viewed Videos in each Country")+xlab(NULL)+ylab(NULL)+ geom_text(aes(label = views, color=I('red')), size = 3, hjust =1,angle=90)
```

Code for visualisation 2:

```
#Grouping by based on best channels - canada
```

```
cangroup <- group_by(UniqueCanadaViews, channel_title,country)

channelCanada <- summarise(cangroup, totalviews = sum(views)) %>%
arrange(desc(totalviews)) %>% head(10)

#Grouping by based on best channels - usa

usagroup <- group_by(UniqueUSAViews, channel_title,country)

channelUSA <- summarise(usagroup, totalviews = sum(views)) %>%
arrange(desc(totalviews)) %>% head(10)

#Grouping by based on best channels - india

Indiagroup <- group_by(UniqueIndiaViews, channel_title,country)

channelIndia <- summarise(Indiagroup, totalviews = sum(views)) %>%
arrange(desc(totalviews)) %>% head(10)

#Combining all the 10 best channels of each country to give us a spread-out
bar plot
TopChannels <- rbind(channelCanada,channelIndia,channelUSA)


ggplot(TopChannels, aes(x = channel_title, y = totalviews, fill = country)) +
geom_bar(stat = "identity", width = .6) + coord_flip() + labs(title="Most
watched channels in all countries") + theme_tufte() + theme(plot.title =
element_text(hjust = .5),axis.ticks = element_blank()) +
scale_fill_brewer(palette = "Dark2") +xlab(NULL) +ylab(NULL)
```

#Iteration

```
ggplot(TopChannels, aes(x = channel_title, y = totalviews, fill = country)) +
geom_bar(stat = "identity", width = .6) + labs(title="Most watched channels in
all countries") + theme(plot.title = element_text(hjust = .5),axis.ticks =
element_blank()) + scale_fill_brewer(palette = "Accent")
```

Code for visualisation 3:

```
#Combining ALL the top viewed videos (with unique video-id) from every
country
countries <- rbind(UniqueCanadaViews,UniqueUSAViews,UniqueIndiaViews)

#Grouping it based on the category title watched in every country and getting
the total sum of the views in that category title from that country
BestCategory <- group_by(countries, category_title, country) %>%
summarise(totalviews = sum(as.double(views)))



treemap(BestCategory,
      index=c("country", "category_title"),
      vSize="totalviews",
      vColor="totalviews",
      type="value", title.legend = "",
      title="Most watched categories by each country",
      format.legend = list(scientific = FALSE, big.mark = " "),
       palette=terrain.colors(7))
```

#Iterations

```
#1)
treemap(BestCategory,
      index=c("category_title"),
      vSize="totalviews",
      vColor="totalviews",
      type="value",
      format.legend = list(scientific = FALSE, big.mark = " "))
```

```
#2)
treemap(BestCategory,
      index=c("country", "category_title"),
      vSize="totalviews",
      vColor="totalviews",
      type="value",
      title="Most watched categories by each country",
      format.legend = list(scientific = FALSE, big.mark = " "),
       palette="RdYlGn",
       range=c(0,11000000000),
       mapping=c(0, 600000000, 11000000000))
```

Code for creating tables of most liked and commented videos:

Canada:

```
#Creating a dataset by combining everything
TopVideosCanada <-
as.data.frame(rbind(TopCanadaLikes,TopCanadaComments))

TopVideosCanadaTable = TopVideosCanada[, c(3, 4, 9, 11)]
colnames(TopVideosCanadaTable) = c("TITLE", "CHANNEL
TITLE","LIKES","COMMENTS")

#Creating a table with all the views, comments and likes and varying the
colours based on their counts

Canada = formattable(TopVideosCanadaTable, list(
        LIKES = color_bar('red'),
        COMMENTS = color_bar('orange')
))
```

India:

```
TopVideosIndia <- rbind(UniqueIndiaLikes1,UniqueIndiaComments1)

TopVideosIndiaTable = TopVideosIndia[, c(3, 4, 9, 11)]
colnames(TopVideosIndiaTable) = c("TITLE", "CHANNEL
TITLE","LIKES","COMMENTS")

#Creating a table with all the views, comments and likes and varying the
colours based on their counts

India = formattable(TopVideosIndiaTable, list(
        LIKES = color_bar('green'),
        COMMENTS = color_bar('orange')
))
```

USA:

```
TopVideosUSA <- rbind(UniqueUSALikes1,UniqueUSAComments1)

TopVideosUSATable = TopVideosUSA[, c(3, 4, 9, 11)]
colnames(TopVideosUSATable) = c("TITLE", "CHANNEL
TITLE","LIKES","COMMENTS")

#Creating a table with all the views, comments and likes and varying the
colours based on their counts

USA = formattable(TopVideosUSATable, list(
        LIKES = color_bar('red'),
        COMMENTS = color_bar('darkblue')
))
```