Capstone Project

PLAY STORE APP REVIEW ANALYSIS

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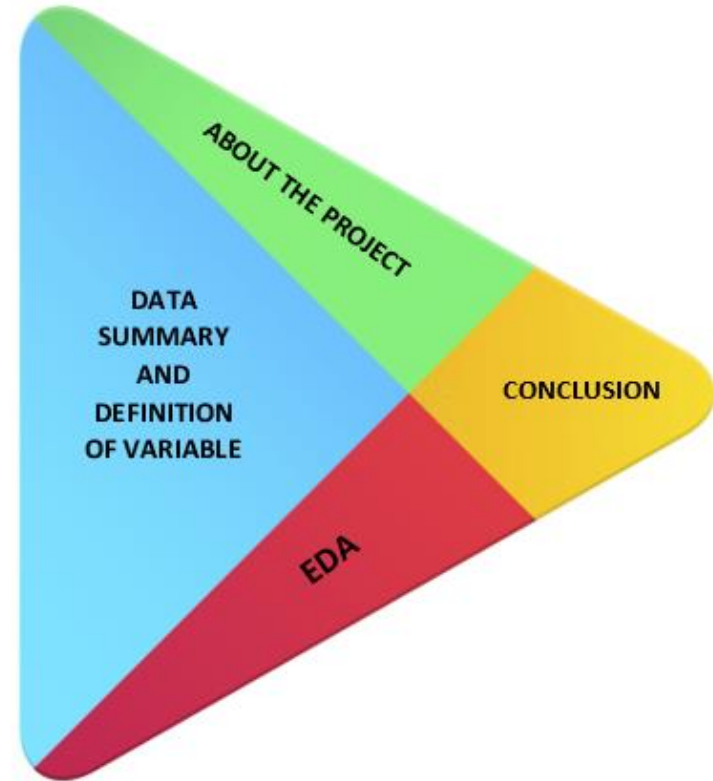
1. ABOUT THE PROJECT

➜ Play Store is an "app store", which allows users to browse and download applications, game, and other media onto their Android device. Users can leave their reviews and rating for the downloaded app in the play store, based on which Apps gets ranked in the Play Store.

➜ We have got an interesting task to analyse the play store apps data and discover the key factors responsible for the app engagement and its success.

➜ The idea of this exercise is to analyse the factors which contributes to app's success. We tried to draw correlations between various features of a given app, so that while designing the App our designers can take them into consideration.

2. DATA SUMMARY AND DEFINITION OF VARIABLES

ps_df - The Play store dataset gives much more information about the app compared to other user review dataset. Following are the variables present in play store data -

- **CATEGORY** – Talks about the 'Category' to which the given app belongs. An app "category" makes it easier for users to discover new apps. For example, a user could click on the "Lifestyle" category in the App Store to discover new Lifestyle related apps.
- **RATING** – Rating gives the mean average rating of all the ratings given by the users in their reviews. The Rating varies from 1 to 5 (all integers). 1 being the lowest while 5 being the highest.

DATA SUMMARY AND DEFINITION OF VARIABLES

- **TYPE:** Whether the App is free or paid
- **PRICE:** Tells the price for paid apps.
- **CONTENT RATING COLUMN:** These ratings talks about the age group of people the given app is for.
- **GENRES:** Genre to which a given app belong.
- **LAST UPDATED:** When was the last time App got its updates
- **CURRENT VER:** Current version of the app
- **ANDROID VER:** Android Ver which is compatible for the app.

ur_df - The Second datatset *User Review* talks mostly about the comments given by the user for the given app and **the sentiment associated** with that comment. This sentiment again is an important key factor for deciding the success of an app.

3. EDA

- **TOP PERFORMING CATEGORIES**

➔ Apps in play store are divided into 33 categories.
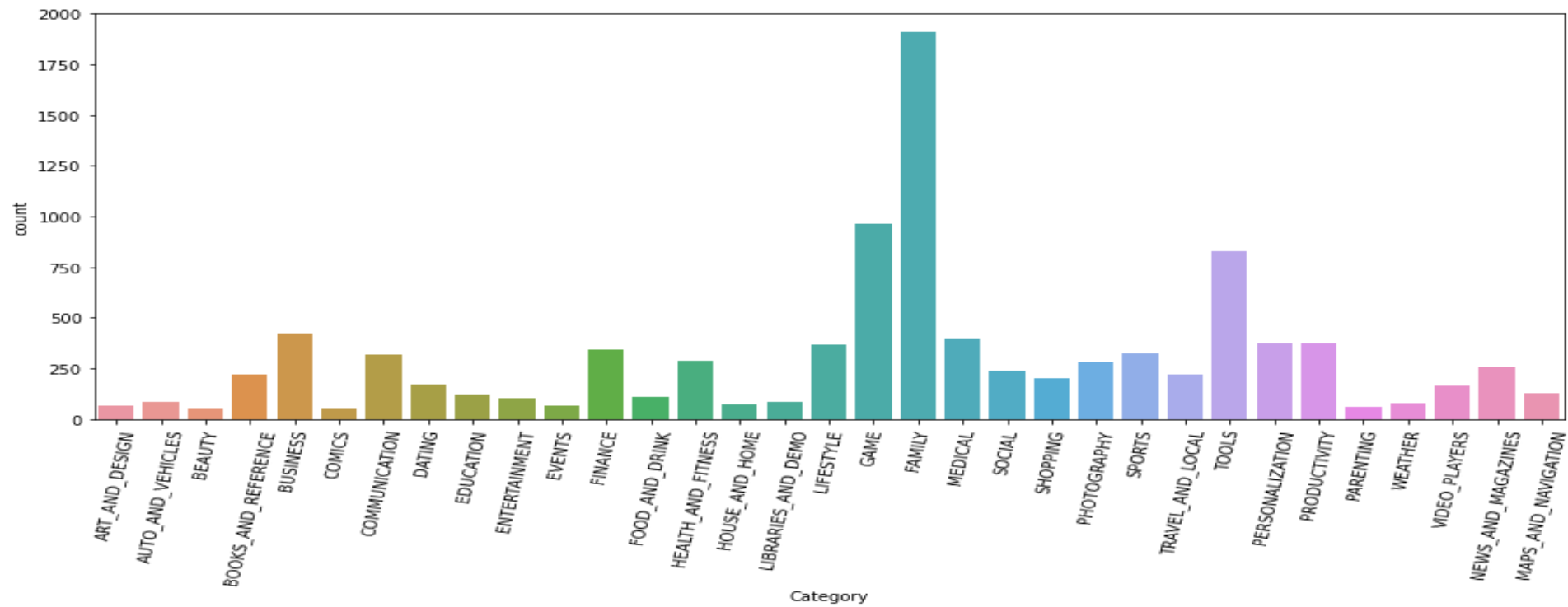
➔ Most Apps in Play store are from - Game, Family and Tools categories.

➔ Top performing Categories are - Communication and Photography based on Installs, Rating and Reviews.

	Category	Installs	Rating
0	PHOTOGRAPHY	10000000.0	4.4
1	COMMUNICATION	10000000.0	4.3

- ## **GENRES**

➜ Apps in play store are divided in 119 different Genres.

➜ Most Apps in Play Store belongs to *Tools, Entertainment* and *Education* Genres.
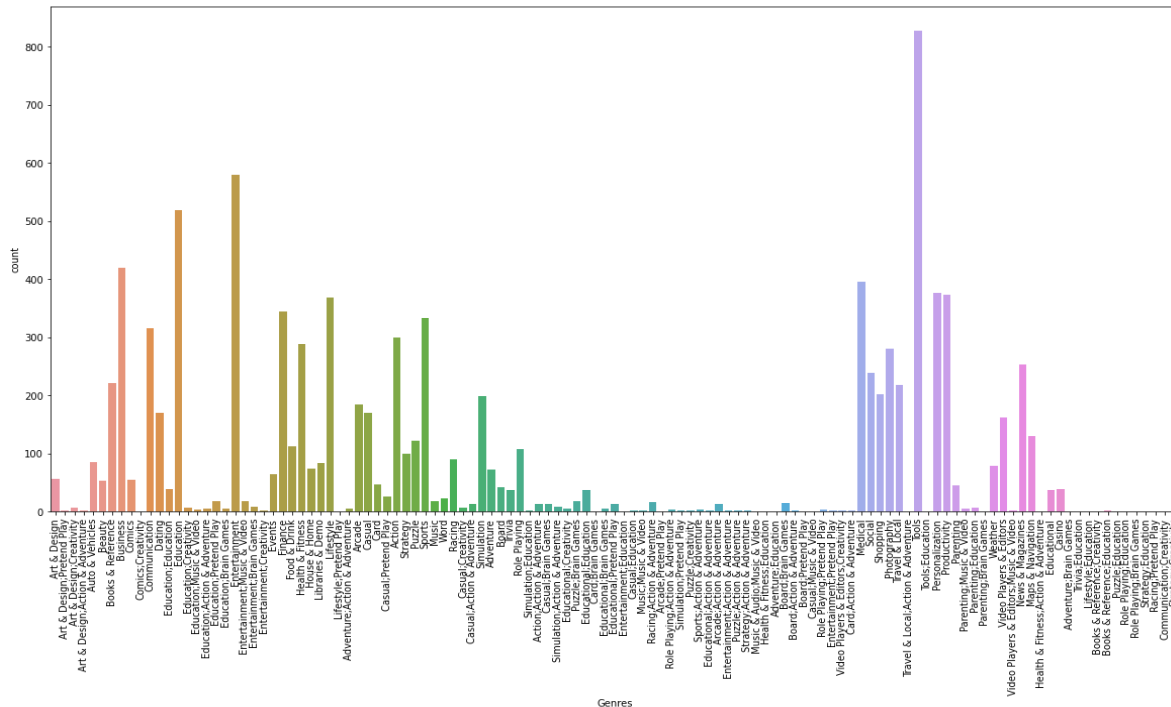
➜ Top two performing Genres based on Installs, Ratings and Reviews are -

	Genres	Installs	Rating
0	Simulation;Action & Adventure	10000000.0	4.5
1	Tools;Education	10000000.0	4.5

• CONTENT-RATING

➔ There are 6 types of content-ratings on which play store apps are divided.

➔ Apps with *Teen* content rating have been downloaded the most.
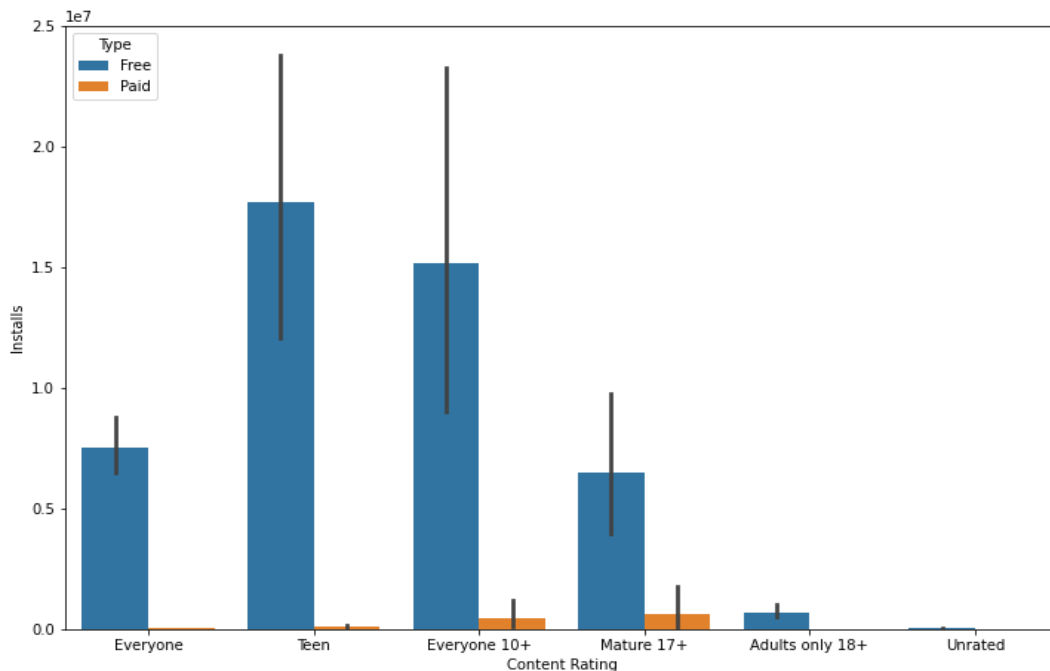
➔ *Teen* again tops the list in terms of performance.

|	Content Rating	Installs
0	Teen	5000000.0
1	Mature 17+	1000000.0

- **TYPE OF APPS**

  ➜ 92.2% of Apps are Free in Play Store and 7.8% of Apps are Paid.
  ➜ Based on number of Installs, Free apps are way to ahead compared to Paid apps installed. Looks like,most People are not gonna give their money for using app anytime soon.
  ➜ In paid types, most of the apps are under $30.

|	Type	Installs
0	Free	1000000.0
1	Paid	100000.0

Distribution of App Types
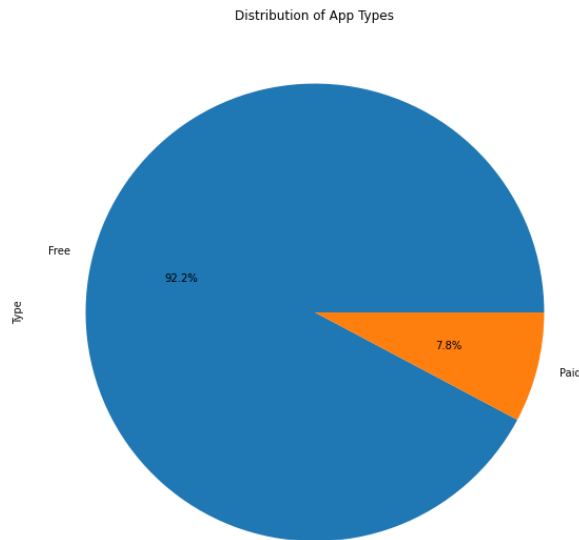
• ANDROID VERSION

➤ Play store apps are divided into 33 different Android versions for their compatibility.

➤ The three Android versions which have been installed the most are - *4.1.7.1.1 , 5.0-8.0 and 4.0.3.7.1.1*
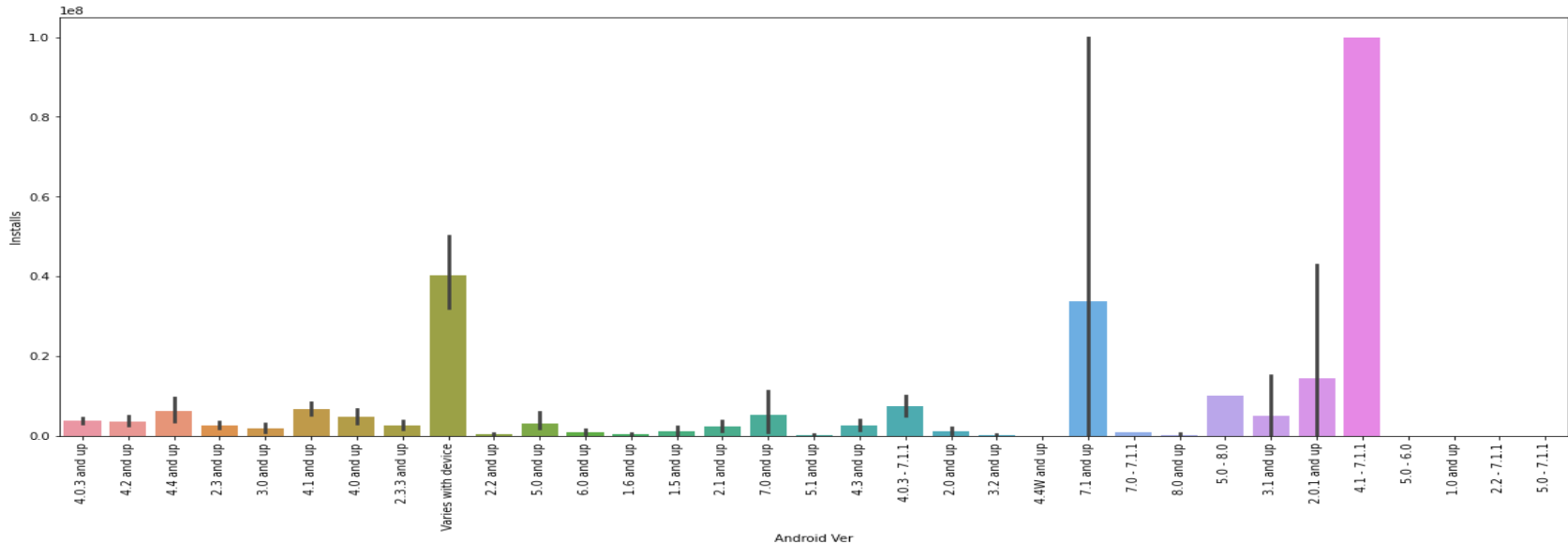
# • EFFECT OF SIZE ON INSTALLS

➜ Apps with small sizes have higher number of installations.

➜ Most Installed Apps are under 25 MB
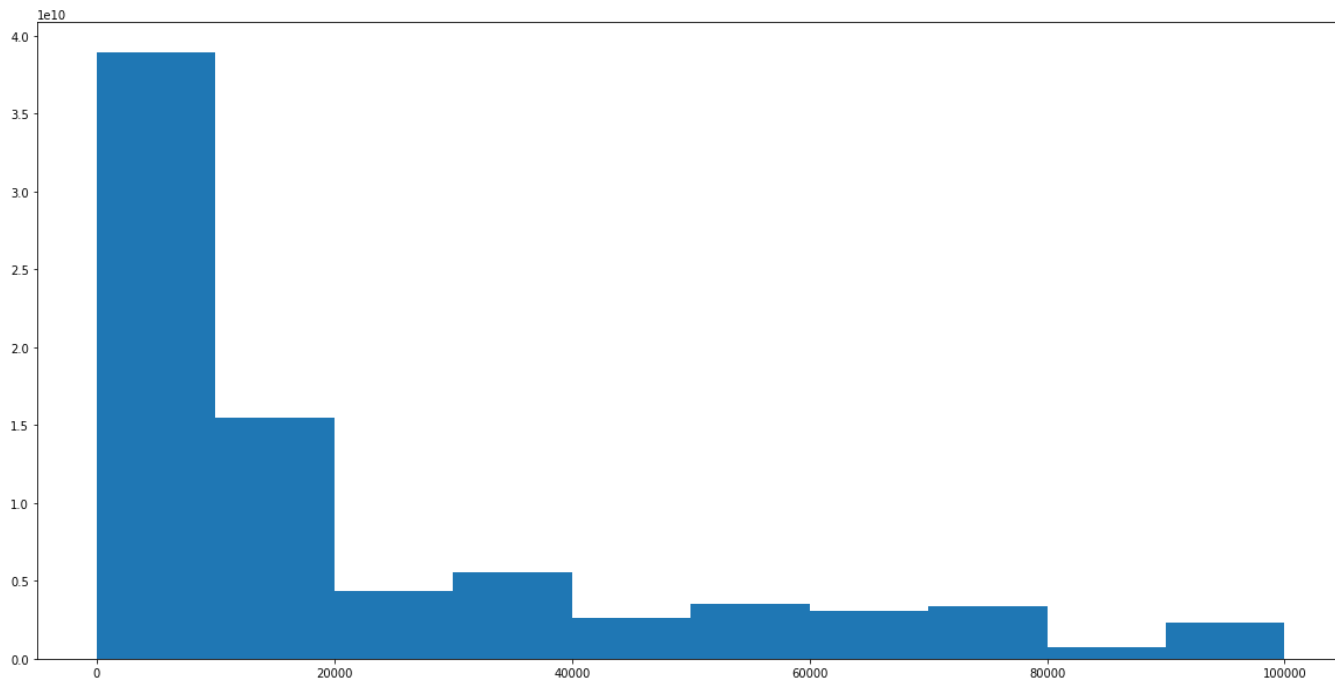
• SENTIMENT DISTRIBUTIONS

➔ From our user review dataset we have found that among all comments given by the users in play store for different Apps, 64% of them have Positive sentiments, 22% have negative sentiments and 14% have Neutral sentiments.

➔ Bowmasters, Angry Birds Classic and Helix jump are three apps with most number of comments.

index	App	
0	Bowmasters	312
1	Angry Birds Classic	273
2	Helix Jump	273

Distribution of Sentiments across apps
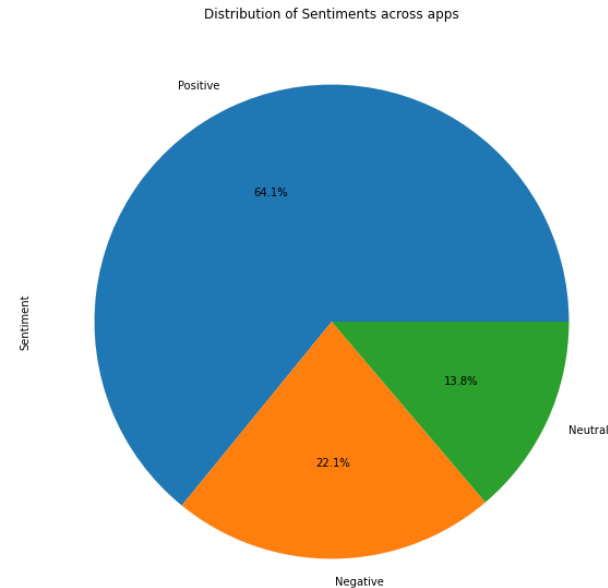
• **TOP APP WITH USER SATISFACTION**

➔ Fast Scanner : Free PDF Scan is the best app in considering all below parameters all together.

➔ Fast Scanner has whooping sentiment ratio of 58.0.

➔ There has been more than 10000000 installs which indicates the popularity.

➔ It has a rating of 4.5 against 103755 number of reviews which shows the engageability and user satisfaction for the app.

App	Negative	Neutral	Positive	Sentiment Ratio	Category	Rating	Reviews	Size	Installs	Type
Fast Scanner : Free PDF Scan	1.0	15.0	58.0	58.0	BUSINESS	4.5	103755.0	14000.0	10000000.0	Free

• WHAT'S IN THE NAME !

➔ Most of the Apps name are consists of 3-4 words.
➔ Most Apps having just one word in their name had most of the downloads.
➔ Exceeding app name with more than 8 keywords might not be a good idea.
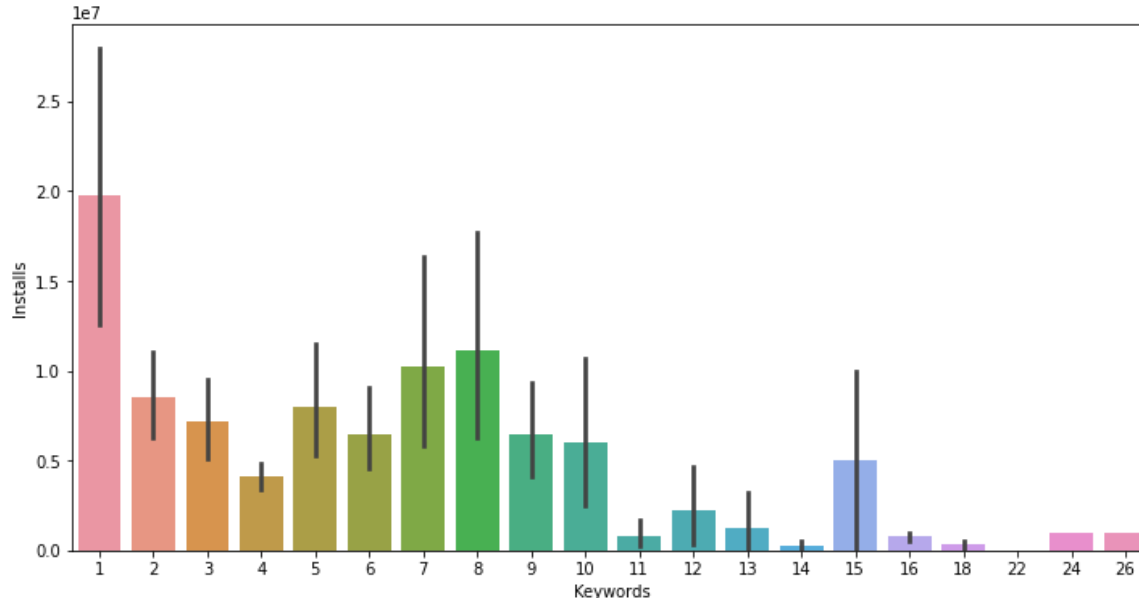
4. CONCLUSION TABLE

1. Photography and Communication are most popular categories.
2. Simulation;Action & Adventure and Tools;Education are top performing genres.
3. Teen is the most popular content rating.
4. Free Apps are more favourable by the users.
5. Most installations were compatible with Android Ver - 4.1.7.1.1.
6. Low Size Apps are much acceptable among users.
7. Apps with one word names are much popular.

THANK YOU