



TEAM DATAWIZ

Team - 43

Playstore Apps Analysis & Visualization

SOLUTION: MODULE 1

1. Which apps have the highest rating in the given available dataset?

Answer:

```
SELECT DISTINCT App,  
    Rating  
FROM my_new_work.lets_see  
WHERE Rating >= 5.0;
```

2. What are the number of installs and reviews for the above apps? Return the apps with the highest reviews to the top.

Answer:

```
SELECT DISTINCT App,  
    Installs,  
    Reviews  
FROM my_new_work.lets_see  
WHERE Rating >= 5.0  
ORDER BY Reviews desc;
```

3. Which app has the highest number of reviews? Also, mention the number of reviews and category of the app

Answer:

App	Category	Reviews
Facebook	SOCIAL	78158306

```
SELECT DISTINCT App,  
    Category,  
    Reviews  
FROM my_new_work.lets_see  
ORDER BY Reviews desc  
LIMIT 1;
```

4. What is the total amount of revenue generated by the google play store by hosting apps?
(Whenever a user buys apps from the google play store, the amount is considered in the revenue)

Answer: Revenue = \$,387,553,792

```
SELECT SUM(Price*Installs) as total_rev
FROM my_new_work.lets_see
WHERE Price != 0 AND Type = 'Paid';
```

5. Which Category of google play store apps has the highest number of installs? also, find out the total number of installs for that particular category.

Answer: Category = GAME
Install = 35086024415

```
SELECT DISTINCT Category,
       SUM(Installs) OVER(PARTITION BY Category) AS high_cat_install
FROM my_new_work.lets_see
ORDER BY high_cat_install DESC;
```

6. Which Genre has the most number of published apps?

Answer: Tools (842)

```
SELECT DISTINCT Genres,
       COUNT(App) OVER(PARTITION BY Genres) AS app_by_genre
FROM my_new_work.lets_see
ORDER BY app_by_genre DESC;
```

7. Provide the list of all games ordered in such a way that the game that has the highest number of installs is displayed on the top (to avoid duplicate results, use distinct)

Answer

```
SELECT
  DISTINCT App,
  Category,
  Installs,
  DENSE_RANK() OVER(ORDER BY Installs DESC) AS ranking
FROM my_new_work.lets_see
WHERE Category = 'GAME';
```

8. Provide the list of apps that can work on android version 4.0.3 and UP.

Answer:

```
SELECT
  App,
  Android_Ver
FROM my_new_work.lets_see
WHERE Android_Ver like '%4 0 3 and up%' ;
```

9. How many apps from the given data set are free? Also, provide the number of paid apps.

Answer: Free App = 10039
Paid App = 800

```
SELECT
  SUM(CASE WHEN Type = 'Free' THEN 1 ELSE 0 END) AS number_of_free,
  SUM(CASE WHEN Type = 'Paid' THEN 1 ELSE 0 END) AS number_of_paid
FROM my_new_work.lets_see;
```

10. Which is the best dating app? (Best dating app is the one having the highest number of Reviews)

Answer Zoosk Dating App Meet Singles

```
SELECT DISTINCT App,
    DENSE_RANK() OVER(ORDER BY Reviews DESC) AS ranking,
    Reviews
FROM my_new_work.lets_see
WHERE Category = 'DATING'
GROUP BY App, Category, Reviews;
```

11. Get the number of reviews having positive sentiment and the number of reviews having negative sentiment for the app **10 best foods for you** and compare them.

Answer: Positive Review: 162
Negative Review: 10

	App	pos_review	neg_review
▶	10 Best Foods for You	162	10

```
SELECT App,
    SUM(CASE WHEN Sentiment = 'Positive' THEN 1 ELSE 0 END) AS pos_review,
    SUM(CASE WHEN Sentiment = 'Negative' THEN 1 ELSE 0 END) AS neg_review
FROM my_new_work.interesting_rev
WHERE App = '10 Best Foods for you' ;
```

12. Which comments of **ASUS SuperNote** have sentiment polarity and sentiment subjectivity both as 1?

Answer:

	Translated_Review	App	Sentiment_Polar...	Sentiment_Subjecti...
▶	Awesome	ASUS SuperNote	1	1

```
SELECT Translated_Review,
    App,
    Sentiment_Polarity,
    Sentiment_Subjectivity
FROM my_new_work.lets_review
WHERE App = 'ASUS SuperNote'
AND Sentiment_Polarity = 1
AND Sentiment_Subjectivity = 1;
```

13. Get all the neutral sentiment reviews for the app **Abs Training-Burn belly fat**

Answer:

```
SELECT
    App,
    Translated_Review,
    Sentiment
FROM my_new_work.lets_review
WHERE App = 'Abs Training Burn belly fat' AND Sentiment = 'Neutral';
```

App	Translated_Review	Sentiment
Abs Training Burn belly fat	I would recommend anyone struggling exercise alone Be encouraged g...	Neutral
Abs Training Burn belly fat	I m sticking literally kicked booty pain gain	Neutral
Abs Training Burn belly fat	Needs work voice tells take break voice keeps going	Neutral
Abs Training Burn belly fat	Pop ads middle night Taking phone F app	Neutral
Abs Training Burn belly fat	I day day I saw difference I went XL medium size	Neutral

14. Extract all negative sentiment reviews for **Adobe Acrobat Reader** with their sentiment polarity and sentiment subjectivity

Answer:

```

SELECT
    ROW_NUMBER() OVER(ORDER BY App ASC) AS indx,
    App,
    Translated_Review,
    Sentiment_Polarity,
    Sentiment_Subjectivity,
    Sentiment
FROM my_new_work.lets_review
WHERE App = 'Adobe Acrobat Reader' AND Sentiment = 'Negative';

```

indx	App	Translated_Review	Sentiment_Polar...	Sentiment_Subjecti...	Sentiment
1	Adobe Acrobat Reader	Not Another Damn Cloud Account I want another blasted Cloud account...	-0.3	0.7	Negative
2	Adobe Acrobat Reader	The previous versions good enough This update poor It allow highligh...	-0.144444444	0.561111111	Negative
3	Adobe Acrobat Reader	Hey Pls update app I m face issues When I opened first time pdf ope...	-0.0125	0.345833333	Negative
4	Adobe Acrobat Reader	Forces account password means Google knowledge me Never required...	-0.275	0.566666667	Negative
5	Adobe Acrobat Reader	Not Another Damn Cloud Account I want another blasted Cloud account...	-0.3	0.7	Negative
6	Adobe Acrobat Reader	The previous versions good enough This update poor It allow highligh...	-0.144444444	0.561111111	Negative
7	Adobe Acrobat Reader	Hey Pls update app I m face issues When I opened first time pdf ope...	-0.0125	0.345833333	Negative
8	Adobe Acrobat Reader	Forces account password means Google knowledge me Never required...	-0.275	0.566666667	Negative
9	Adobe Acrobat Reader	Forces account password means Google knowledge me Never required...	-0.275	0.566666667	Negative
10	Adobe Acrobat Reader	Not Another Damn Cloud Account I want another blasted Cloud account...	-0.3	0.7	Negative
11	Adobe Acrobat Reader	The previous versions good enough This update poor It allow highligh...	-0.144444444	0.561111111	Negative
12	Adobe Acrobat Reader	Hey Pls update app I m face issues When I opened first time pdf ope...	-0.0125	0.345833333	Negative
13	Adobe Acrobat Reader	Too boring I m trying scan document give option scan In last two days w...	-0.3	0.488888889	Negative
14	Adobe Acrobat Reader	After using adobe iphone version annoying Doesnt allow simple option pl...	-0.2	0.552380952	Negative
15	Adobe Acrobat Reader	Love app Hate file manager Open file saved downloads edits copy privat...	-0.075	0.59375	Negative
16	Adobe Acrobat Reader	It s difficult select text stupid pg function side screen touch screen functio...	-0.575	0.9	Negative
17	Adobe Acrobat Reader	It s actually terrible The biggest flaw return automatically open file open A...	-0.275	0.525	Negative
18	Adobe Acrobat Reader	Its like I using ghost it keeps scrolling pages automatically and even so...	-0.275	0.95	Negative
19	Adobe Acrobat Reader	Adobe removed option saving changes pdfs locally save changes cloud...	-0.0875	0.520833333	Negative
20	Adobe Acrobat Reader	If wish EXPORT give birthdate What A mobile never asks this Not inte...	-0.125	0.5	Negative
21	Adobe Acrobat Reader	Does exactly PC based version Brilliant At last Window based ruined run...	-0.229166667	0.438888889	Negative
22	Adobe Acrobat Reader	This sux saves cloud Unless im missing something	-0.2	0.05	Negative
23	Adobe Acrobat Reader	Stupid app Whenever I open pdf file making copy file accessible only	-0.10625	0.71875	Negative
24	Adobe Acrobat Reader	This almost everything I need pdfs unfortunately lack Chromebook intergr...	-0.0625	0.558333333	Negative
25	Adobe Acrobat Reader	It good app But problem unable share photos images unable sending eve...	-0.1	0.533333333	Negative
26	Adobe Acrobat Reader	Apparently I log view pdf Idiotic	-0.308333333	0.591666667	Negative
27	Adobe Acrobat Reader	Very little usefulness keep getting messages require DC Windows Mac an...	-0.46484375	0.425	Negative
28	Adobe Acrobat Reader	Can t rename documents latest update Using Android 7 I ve got downloa...	-0.25	0.933333333	Negative

****Upon completing the module, please submit your ZIP files in the [google form](#) here.***
Guidelines for submissions are mentioned below:

1. A [google form](#) will be circulated for module files submissions.
2. For module 1 you have to submit 4 files as mentioned below:
 1. A Text file consisting of the solutions to each SQL requirement.
 2. .py file used for cleaning the dataset
 3. Cleaned .csv file of playstore_apps dataset
 4. Cleaned .csv file of playstore_reviews dataset

**create a zip file of all the 4 files and then make the submission.*