

## Team name - Girls Squad

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### Module 1 - Playstore Apps analysis

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

```
SELECT App AS top_apps, Rating
FROM playstore_apps
WHERE Rating = 5;
```

```
1 %sql
2 SELECT App AS top_apps, Rating
3 FROM playstore_apps
4 WHERE Rating = 5;
```

▸ (1) Spark Jobs

▸  \_sqldf: pyspark.sql.dataframe.DataFrame = [top\_apps: string, Rating: string]

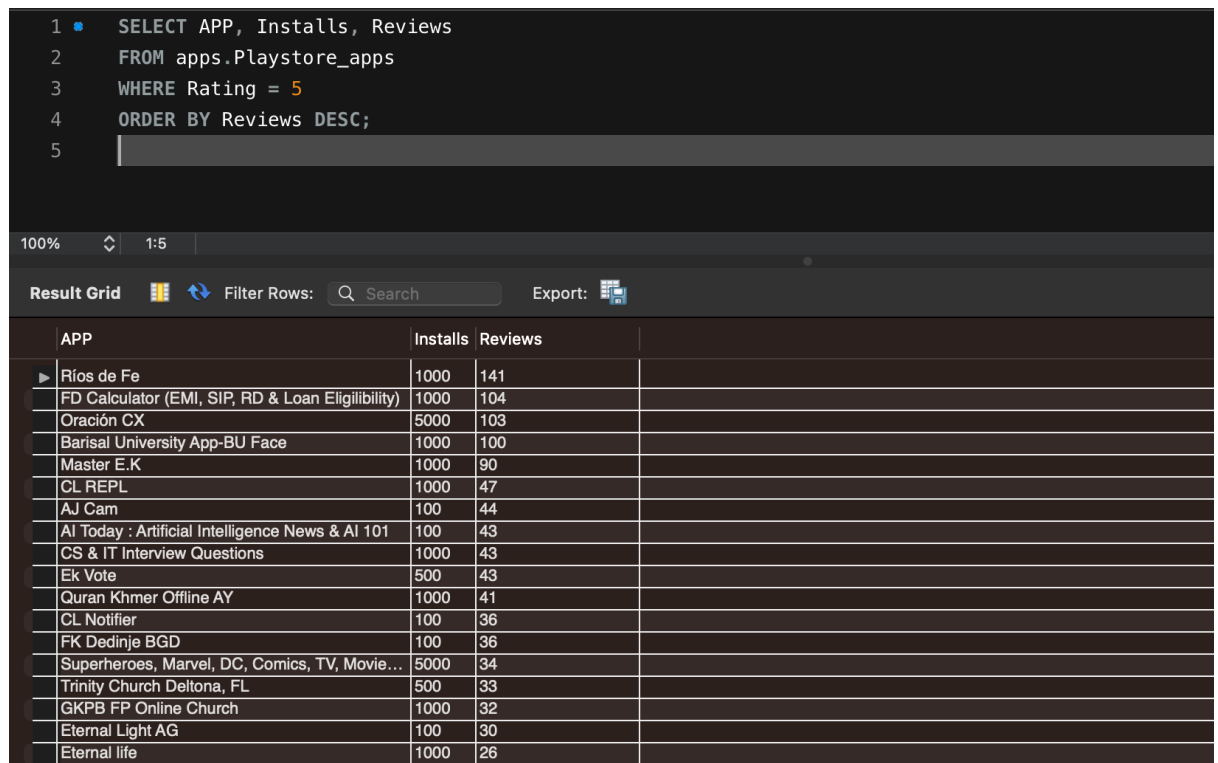
Table ▾ +

	top_apps ▲	Rating ▲	
1	211:CK	5	
2	30WPM Amateur ham radio Koch CW Morse code trainer	5	
3	420 BZ Budeze Delivery	5	
4	AC DC Power Monitor	5	
5	Accounting Quiz (AQ) Malaysia	5	
6	ADS-B Driver	5	
7	Aa Vallev Cooperative	5	

⬇ Showing all 271 rows. | 1.91 seconds runtime

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

```
SELECT App, Installs, Reviews
FROM apps.Playstore_apps
WHERE Rating = 5
ORDER BY Reviews DESC;
```



The screenshot shows a SQL query editor with the following query:

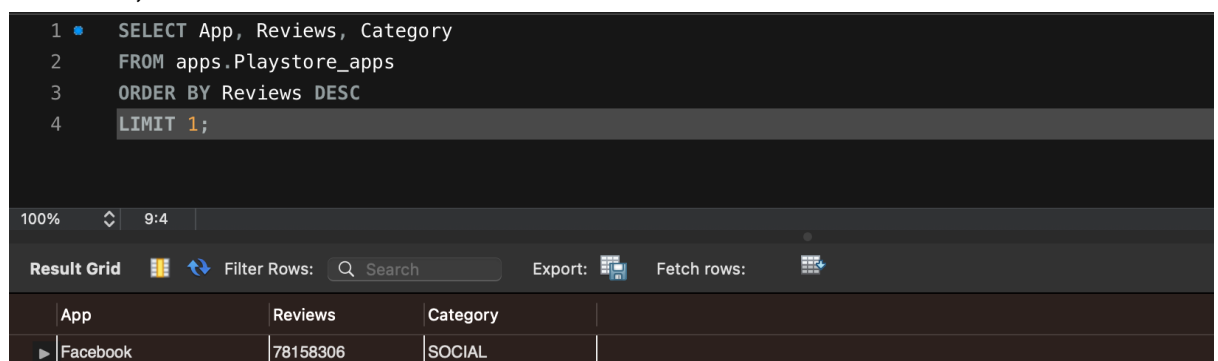
```
1 SELECT APP, Installs, Reviews
2 FROM apps.Playstore_apps
3 WHERE Rating = 5
4 ORDER BY Reviews DESC;
```

Below the query editor is a 'Result Grid' showing the results of the query. The grid has columns for APP, Installs, and Reviews. The results are sorted by Reviews in descending order.

APP	Installs	Reviews
Ríos de Fe	1000	141
FD Calculator (EMI, SIP, RD & Loan Eligibility)	1000	104
Oración CX	5000	103
Barisal University App-BU Face	1000	100
Master E.K	1000	90
CL REPL	1000	47
AJ Cam	100	44
AI Today : Artificial Intelligence News & AI 101	100	43
CS & IT Interview Questions	1000	43
Ek Vote	500	43
Quran Khmer Offline AY	1000	41
CL Notifier	100	36
FK Dedinje BGD	100	36
Superheroes, Marvel, DC, Comics, TV, Movie...	5000	34
Trinity Church Deltona, FL	500	33
GKPB FP Online Church	1000	32
Eternal Light AG	100	30
Eternal life	1000	26

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

```
SELECT App, Reviews, Category
FROM apps.Playstore_apps
ORDER BY Reviews DESC
LIMIT 1;
```



The screenshot shows a SQL query editor with the following query:

```
1 SELECT App, Reviews, Category
2 FROM apps.Playstore_apps
3 ORDER BY Reviews DESC
4 LIMIT 1;
```

Below the query editor is a 'Result Grid' showing the results of the query. The grid has columns for App, Reviews, and Category. The results are sorted by Reviews in descending order, and only the top result is shown.

App	Reviews	Category
Facebook	78158306	SOCIAL

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)

```
SELECT ROUND(SUM(Price * Installs),2) AS total_revenue
FROM apps.Playstore_apps
WHERE Type = "Paid";
```

```
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
2 # google play store, the amount is considered in the revenue)
3 • SELECT ROUND(SUM(Price * Installs),2) AS total_revenue
4 FROM apps.Playstore_apps
5 WHERE Type LIKE 'Paid'
6 ;
7
```

100% 1:7

Result Grid Filter Rows: Search Export:

total_revenue
▶ 367471847.79

Result Grid

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.

```
SELECT Category, SUM(Installs) AS total_installs
FROM apps.Playstore_apps
GROUP BY Category
ORDER BY total_installs DESC
LIMIT 1;
```

```
1 #5. Which Category of google play store apps has the highest number of installs? also, find out the total number of installs for
2 #particular category.
3 • SELECT Category, SUM(Installs) AS total_installs
4 FROM apps.Playstore_apps
5 GROUP BY Category
6 ORDER BY total_installs DESC
7 LIMIT 1;
8
```

100% 1:8

Result Grid Filter Rows: Search Export: Fetch rows:

Category	total_installs
▶ GAME	31544024415

Result Grid

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

```
SELECT Genres, COUNT(Genres) AS total_apps
FROM apps.Playstore_apps
GROUP BY Genres
ORDER BY total_apps DESC
LIMIT 1;
```

```
1  #6. Which Genre has the most number of published apps?
2  SELECT Genres, COUNT(Genres) AS total_apps
3  FROM apps.Playstore_apps
4  GROUP BY Genres
5  ORDER BY total_apps DESC
6  LIMIT 1;
```

100% 9:6

Result Grid Filter Rows: Search Export: Fetch rows:

Genres	total_apps
Tools	842

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)

```
SELECT DISTINCT App, Installs
FROM playstore_apps
WHERE Category = "GAME"
ORDER BY Installs DESC;
```

```
1 %sql
2 SELECT DISTINCT App, Installs
3 FROM playstore_apps
4 WHERE Category = 'GAME'
5 ORDER BY Installs DESC;
6
```

► (2) Spark Jobs

►  \_sqldf: pyspark.sql.dataframe.DataFrame = [App: string, Installs: double]

Table ▾ +

	App ▲	Installs ▲	
1	Subway Surfers	1000000000	
2	Pou	500000000	
3	Candy Crush Saga	500000000	
4	My Talking Tom	500000000	
5	Temple Run 2	500000000	
6	Crossy Road	100000000	
7	Candy Crush Soda Saga	100000000	

⬇ Showing all 947 rows. | 1.30 seconds runtime

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

a) android version '4.0.3 and UP'

```
SELECT App, `Android Ver`  
FROM playstore_apps  
WHERE `Android Ver` = "4.0.3 and up";
```

```
1 %sql  
2 SELECT App, `Android Ver`  
3 FROM playstore_apps  
4 WHERE `Android Ver` = '4.0.3 and up';  
5
```

▶ (1) Spark Jobs

▶ \_sqlidf: pyspark.sql.dataframe.DataFrame = [App: string, Android Ver: string]

Table ▾ +	
App	Android Ver
1 ?? Comics - Manga,Novel and Stories	4.0.3 and up
2 ?? Football Wallpapers 4K   Full HD Backgrounds ??	4.0.3 and up
3 ?? WhatsLov: Smileys of love, stickers and GIF	4.0.3 and up
4 ??? - ????, ?????, BJ??	4.0.3 and up
5 ??? ??? H	4.0.3 and up
6 ????? Astrology - Min Thein Kha BayDin	4.0.3 and up
7 ??????????EJ STYLE???????????	4.0.3 and up
Truncated results, showing first 1,000 rows. ▾   0.52 seconds runtime	

b) All android versions including '4.0.3 and UP' and above

```
SELECT App, `Android Ver`  
FROM playstore_apps  
WHERE `Android Ver` <= "4.0 and up"  
AND `Android Ver` LIKE "4%"  
OR `Android Ver` LIKE "5%"  
OR `Android Ver` LIKE "6%"  
OR `Android Ver` LIKE "7%"  
OR `Android Ver` LIKE "8%"  
ORDER BY `Android Ver`;
```

```
1 %sql  
2 SELECT App, `Android Ver`  
3 FROM playstore_apps  
4 WHERE `Android Ver` <= '4.0 and up'  
5 AND `Android Ver` LIKE '4%'  
6 OR `Android Ver` LIKE '5%'  
7 OR `Android Ver` LIKE '6%'  
8 OR `Android Ver` LIKE '7%'  
9 OR `Android Ver` LIKE '8%'  
10 ORDER BY `Android Ver`;  
11
```

▶ (1) Spark Jobs

▶ \_sqlidf: pyspark.sql.dataframe.DataFrame = [App: string, Android Ver: string]

Table ▾ +	
App	Android Ver
1 Browser 4G	4.0.3 - 7.1.1
2 Web Browser & Explorer	4.0.3 - 7.1.1
3 ?? Comics - Manga,Novel and Stories	4.0.3 and up
4 ?? Football Wallpapers 4K   Full HD Backgrounds ??	4.0.3 and up
5 ?? WhatsLov: Smileys of love, stickers and GIF	4.0.3 and up
6 ??? - ????, ?????, BJ??	4.0.3 and up
7 ??? ??? H	4.0.3 and up
Truncated results, showing first 1,000 rows. ▾   0.94 seconds runtime	

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

```
SELECT COUNT(App) AS total_free_apps
FROM playstore_apps
WHERE Type = "Free";
```

```
SELECT COUNT(App) AS total_paid_apps
FROM playstore_apps
WHERE Type = "Paid";
```

```
1  #9.How many apps from the given data set are free? Also, provide the number of paid apps.
2  • SELECT COUNT(App) AS total_free_apps
3    FROM apps.Playstore_apps
4    WHERE Type LIKE 'Free';
5  • SELECT COUNT(App) AS total_paid_apps
6    FROM apps.Playstore_apps
7    WHERE Type LIKE 'Paid';
8
```

100% 1:8

Result Grid Filter Rows: Search Export:

total_free_apps
▶ 9582

```
1  #9.How many apps from the given data set are free? Also, provide the number of paid apps.
2  • SELECT COUNT(App) AS total_free_apps
3    FROM apps.Playstore_apps
4    WHERE Type LIKE 'Free';
5  • SELECT COUNT(App) AS total_paid_apps
6    FROM apps.Playstore_apps
7    WHERE Type LIKE 'Paid';
8
```

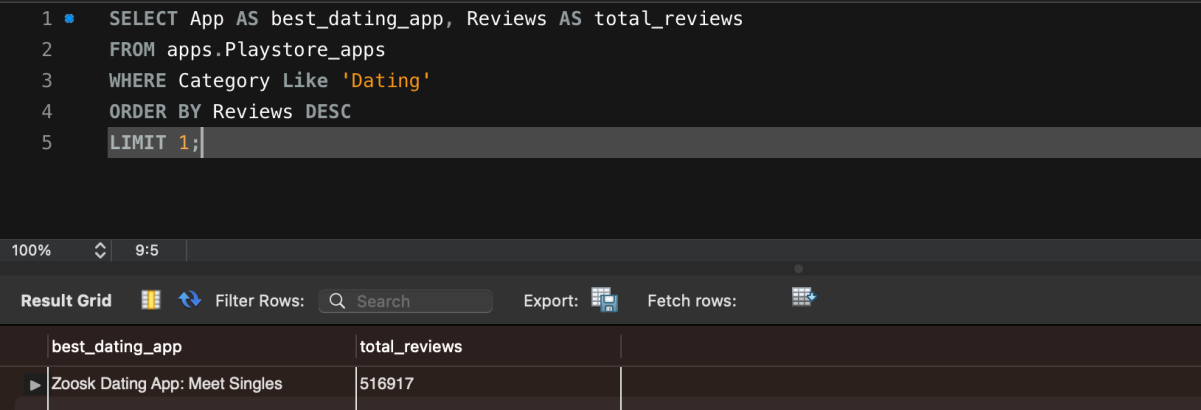
100% 1:8

Result Grid Filter Rows: Search Export:

total_paid_apps
▶ 765

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

```
SELECT App AS best_dating_app, Reviews AS total_reviews
FROM apps.Playstore_apps
WHERE Category = "DATING"
ORDER BY Reviews DESC
LIMIT 1;
```



The screenshot shows a SQL query execution interface. The query is as follows:

```
1 SELECT App AS best_dating_app, Reviews AS total_reviews
2 FROM apps.Playstore_apps
3 WHERE Category Like 'Dating'
4 ORDER BY Reviews DESC
5 LIMIT 1;
```

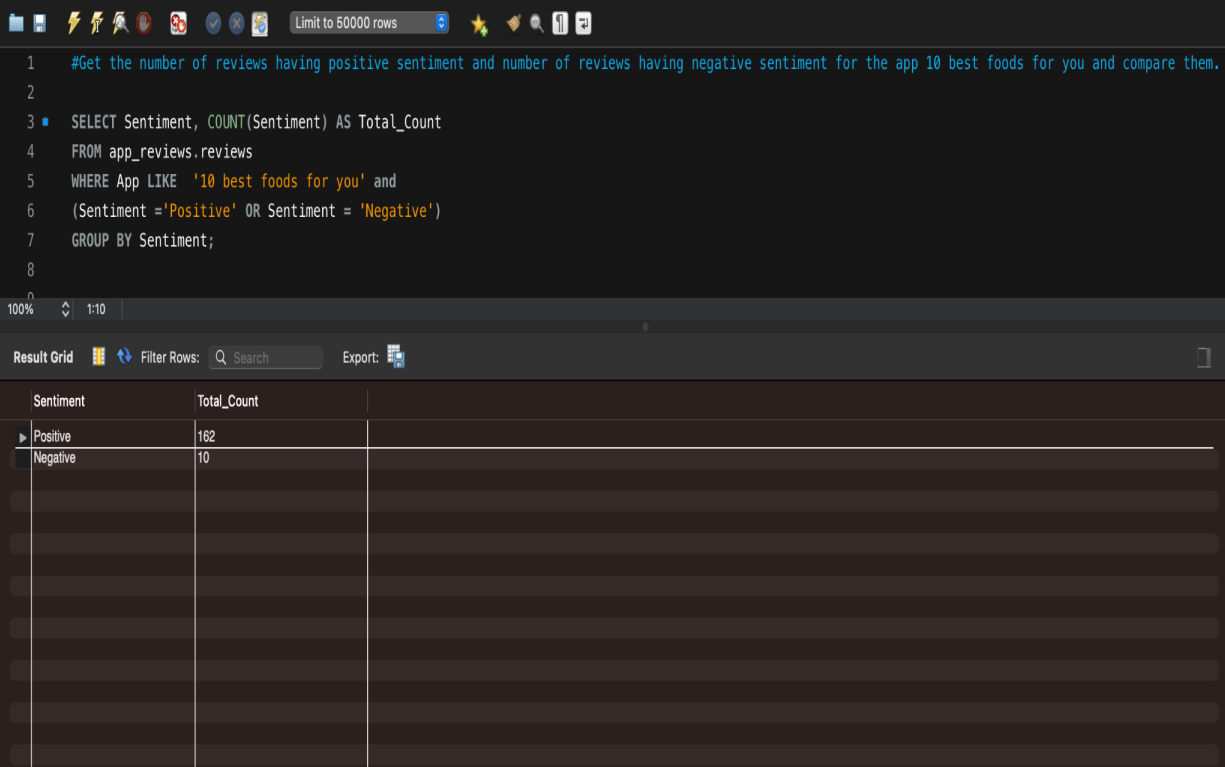
Below the query, the interface shows a "Result Grid" with the following data:

best_dating_app	total_reviews
Zoosk Dating App: Meet Singles	516917



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

```
SELECT Sentiment, COUNT(Sentiment) AS Total_Count
FROM reviews
WHERE App LIKE "10 best foods for you"
AND (Sentiment = "Positive" OR Sentiment = "Negative")
GROUP BY Sentiment;
```



The screenshot shows a SQL query editor with the following query:

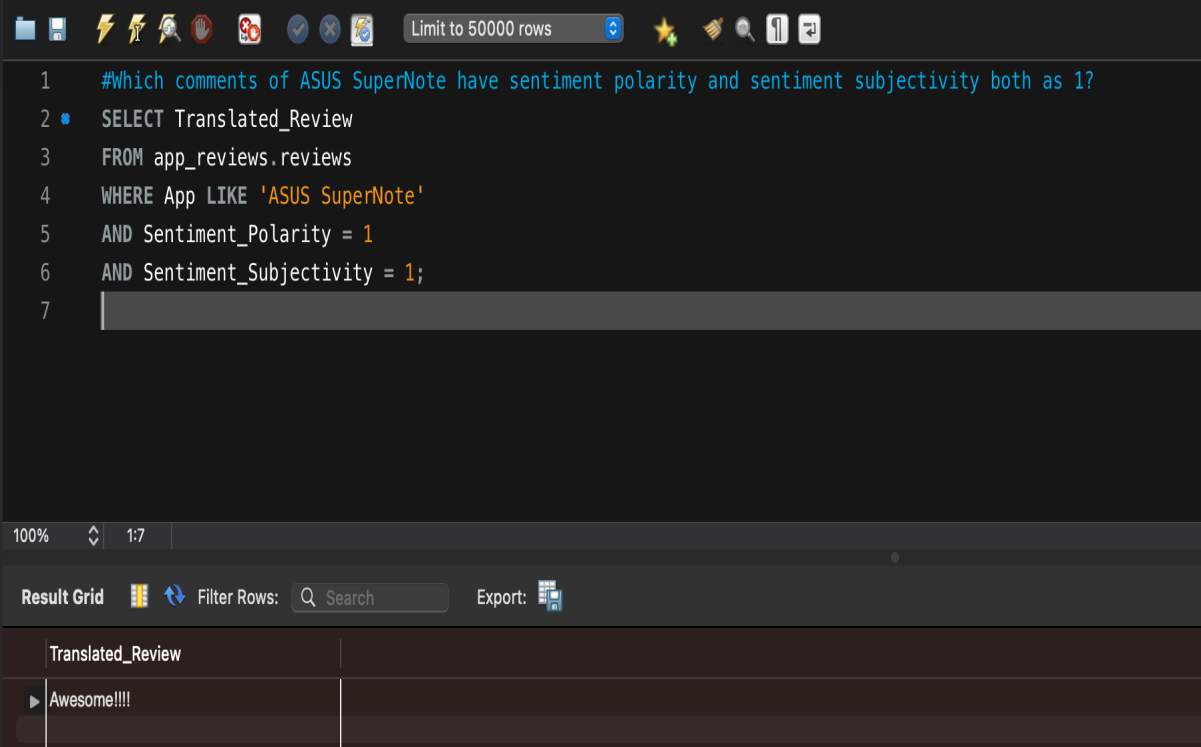
```
1 #Get the number of reviews having positive sentiment and number of reviews having negative sentiment for the app 10 best foods for you and compare them.
2
3 SELECT Sentiment, COUNT(Sentiment) AS Total_Count
4 FROM app_reviews.reviews
5 WHERE App LIKE '10 best foods for you' and
6 (Sentiment = 'Positive' OR Sentiment = 'Negative')
7 GROUP BY Sentiment;
8
```

Below the query editor, the results are displayed in a table with two columns: Sentiment and Total\_Count.

Sentiment	Total_Count
Positive	162
Negative	10

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

```
SELECT Translated_Review
FROM reviews
WHERE App LIKE 'ASUS SuperNote'
AND Sentiment_Polarity = 1
AND Sentiment_Subjectivity = 1;
```



The screenshot shows a SQL query editor interface. The query is as follows:

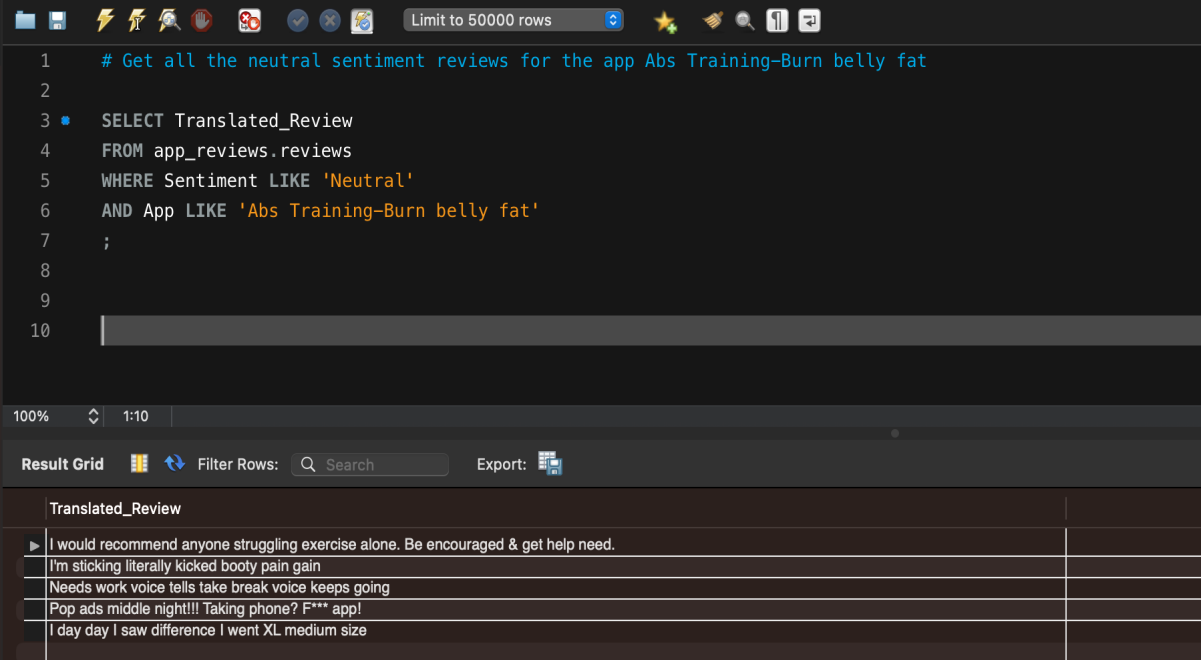
```
1 #Which comments of ASUS SuperNote have sentiment polarity and sentiment subjectivity both as 1?
2 SELECT Translated_Review
3 FROM app_reviews.reviews
4 WHERE App LIKE 'ASUS SuperNote'
5 AND Sentiment_Polarity = 1
6 AND Sentiment_Subjectivity = 1;
7
```

The interface includes a toolbar at the top with icons for file operations, a "Limit to 50000 rows" dropdown, and a search icon. Below the query editor, there is a "Result Grid" section with a search bar and an "Export" button. The results table has a single row with the value "Awesome!!!!" under the "Translated\_Review" column.

Translated_Review
Awesome!!!!

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

```
SELECT Translated_Review
FROM reviews
WHERE Sentiment LIKE "Neutral"
AND App LIKE "Abs Training-Burn belly fat";
```



The screenshot shows a SQL query editor with a dark theme. The query is: `# Get all the neutral sentiment reviews for the app Abs Training-Burn belly fat`, `SELECT Translated_Review`, `FROM app_reviews.reviews`, `WHERE Sentiment LIKE 'Neutral'`, `AND App LIKE 'Abs Training-Burn belly fat'`, `;`. Below the editor, there is a 'Result Grid' section with a search bar and an 'Export' button. The results are displayed in a table with two columns: 'Translated\_Review' and an empty column. The first row is expanded, showing a list of reviews.

Translated_Review	
I would recommend anyone struggling exercise alone. Be encouraged & get help need.	
I'm sticking literally kicked booty pain gain	
Needs work voice tells take break voice keeps going	
Pop ads middle night!!! Taking phone? F*** app!	
I day day I saw difference I went XL medium size	

```
SELECT Translated_Review, Sentiment_Polarity, Sentiment_Subjectivity
FROM reviews
WHERE App LIKE "Adobe Acrobat Reader"
AND Sentiment = "Negative";
```

[illegible]