**SQL Questions**

Google Play store.

1. You're working as a market analyst for a mobile app development company. Your task is to identify the most promising categories (TOP 5) for launching new free apps based on their average ratings.
2. As a business strategist for a mobile app company, your objective is to pinpoint the three categories that generate the most revenue from paid apps. This calculation is based on the product of the app price and its number of installations.
3. As a data analyst for a gaming company, you're tasked with calculating the percentage of games within each category. This information will help the company understand the distribution of gaming apps across different categories.
4. As a data analyst at a mobile app-focused market research firm you’ll recommend whether the company should develop paid or free apps for each category based on the ratings of that category.
5. Suppose you're a database administrator your databases have been hacked and hackers are changing price of certain apps on the database, it is taking long for IT team to neutralize the hack, however you as a responsible manager don’t want your data to be changed, do some measure where the changes in price can be recorded as you can’t stop hackers from making changes.
6. Your IT team have neutralized the threat; however, hackers have made some changes in the prices, but because of your measure you have noted the changes, now you want correct data to be inserted into the database again.
7. As a data person you are assigned the task of investigating the correlation between two numeric factors: app ratings and the quantity of reviews.
8. Your boss noticed that some rows in genres columns have multiple genres in them, which was creating issue when developing the recommender system from the data he/she assigned you the task to clean the genres column and make two genres out of it, rows that have only one genre will have other column as blank.
9. Your senior manager wants to know which apps are not performing as par in their particular category, however he is not interested in handling too many files or list for every category and he/she assigned you with a task of creating a dynamic tool where he/she can input a category of apps he/she interested in and your tool then provides real-time feedback by displaying apps within that category that have ratings lower than the average rating for that specific category.
10. Calculate the average rating of apps in each category, where the rating is adjusted based on the number of installations. The adjustment factor is defined as the square root of the number of installations. Write a user-defined function to calculate the adjusted rating, and then use it to find the average adjusted rating for each category.