

Learners have to come up with a Report to support the answers to the following questions and suggestions

Objective Questions

1. Are there any tables with duplicate or missing null values? If so, how would you handle them?
2. What is the distribution of user activity levels (e.g., number of posts, likes, comments) across the user base?
3. Calculate the average number of tags per post (photo_tags and photos tables).
4. Identify the top users with the highest engagement rates (likes, comments) on their posts and rank them.
5. Which users have the highest number of followers and followings?
6. Calculate the average engagement rate (likes, comments) per post for each user.
7. Get the list of users who have never liked any post (users and likes tables)
8. How can you leverage user-generated content (posts, hashtags, photo tags) to create more personalized and engaging ad campaigns?
9. Are there any correlations between user activity levels and specific content types (e.g., photos, videos, reels)? How can this information guide content creation and curation strategies?
10. Calculate the total number of likes, comments, and photo tags for each user.
11. Rank users based on their total engagement (likes, comments, shares) over a month.
12. Retrieve the hashtags that have been used in posts with the highest average number of likes. Use a CTE to calculate the average likes for each hashtag first.
13. Retrieve the users who have started following someone after being followed by that person

Subjective Questions

1. Based on user engagement and activity levels, which users would you consider the most loyal or valuable? How would you reward or incentivize these users?
2. For inactive users, what strategies would you recommend to re-engage them and encourage them to start posting or engaging again?
3. Which hashtags or content topics have the highest engagement rates? How can this information guide content strategy and ad campaigns?
4. Are there any patterns or trends in user engagement based on demographics (age, location, gender) or posting times? How can these insights inform targeted marketing campaigns?
5. Based on follower counts and engagement rates, which users would be ideal candidates for influencer marketing campaigns? How would you approach and collaborate with these influencers?
6. Based on user behavior and engagement data, how would you segment the user base for targeted marketing campaigns or personalized recommendations?
7. If data on ad campaigns (impressions, clicks, conversions) is available, how would you measure their effectiveness and optimize future campaigns?
8. How can you use user activity data to identify potential brand ambassadors or advocates who could help promote Instagram's initiatives or events?
9. How would you approach this problem, if the objective and subjective questions weren't given?
10. Assuming there's a "User_Interactions" table tracking user engagements, how can you update the "Engagement_Type" column to change all instances of "Like" to "Heart" to align with Instagram's terminology?