

1. Target Audience Identification

- Which age groups and demographics (e.g., location, profession) are most active on specific social media platforms?

```
SELECT Age_Group, COUNT(*) as "Number of Users"  
FROM social_media_usage.user_activity  
GROUP BY 1  
ORDER BY 2 DESC;
```

Answer:

	Age_Group	Number of Users
▶	45-54	237
	35-44	217
	25-34	199
	55-64	193
	18-24	154

```
SELECT Platform, COUNT(Platform) as "Number of Users"  
FROM social_media_usage.user_activity  
GROUP BY 1  
ORDER BY 2 DESC;
```

Answer:

	Platform	Number of Users
▶	TikTok	273
	Instagram	256
	YouTube	250
	Facebook	221

2. Content Strategy

- How does the level of satisfaction with content vary across different platforms?

```
SELECT Platform, AVG(Satisfaction) as "Average Satisfaction"
FROM social_media_usage.user_activity
GROUP BY 1
ORDER BY 2 DESC;
```

Answer:

	Platform	Average Satisfaction
▶	Facebook	4.9321
	Instagram	4.9219
	TikTok	4.8645
	YouTube	4.7440

3. Behavioral Insights:

- How does productivity loss vary by platform, and which platforms contribute most to this?

```
SELECT Platform, AVG(Productivity_loss) AS "Average Productivity Loss"
FROM social_media_usage.user_activity
GROUP BY 1
ORDER BY 2 DESC;
```

Answer:

	Platform	Average Productivity Loss
▶	YouTube	5.2560
	TikTok	5.1355
	Instagram	5.0781
	Facebook	5.0679

4. Campaign Optimization:

- How can campaigns be timed based on the peak hours of platform usage?

```
SELECT Platform, Time as "Peak Time"
FROM (SELECT Platform, DATE_FORMAT(Watch_TIME, '%H:%i') AS "Time",
COUNT(*), ROW_NUMBER() OVER (PARTITION BY Platform ORDER BY COUNT(*)
DESC) AS rn
FROM social_media_usage.user_activty
GROUP BY 1,2
ORDER BY 3 DESC, 1 ASC)
AS a
WHERE rn = 1;
```

Answer:

	Platform	Peak Time
►	TikTok	14:00
	YouTube	14:00
	Instagram	21:00
	Facebook	14:00

- Target Age Group, the reason they watch, and the platform they watch on the most

```
WITH a AS (
    SELECT Age_Group, COUNT(*)
    FROM social_media_usage.user_activty
    GROUP BY Age_Group
    ORDER BY 2 DESC
    LIMIT 1),
b AS (
    SELECT Watch_Reason, COUNT(*)
    FROM social_media_usage.user_activty
    GROUP BY Watch_Reason
    ORDER BY 2 DESC
    LIMIT 1),
c as(
    SELECT Platform, COUNT(*)
    FROM social_media_usage.user_activty
    WHERE Age_Group = (SELECT Age_Group FROM a) AND Watch_Reason = (SELECT
    Watch_Reason FROM b)
    group by 1
    ORDER BY 2 DESC
    limit 1)
SELECT a.Age_Group, b.Watch_Reason, c.Platform
FROM a,b,c;
```

Answer:

	Age_Group	Watch_Reason	Platform
▶	45-54	Habit	Instagram

Data Cleaning:

```
UPDATE social_media_usage.user_activty
SET Profession = "Driver"
WHERE Profession = "driver";
```

Data Transformation

- Creating Age Groups Column

```
ALTER TABLE social_media_usage.user_activty  
ADD Age_Group VARCHAR(10);
```

– Creating Age Groups

```
UPDATE social_media_usage.user_activty  
SET Age_Group =  
    CASE  
        WHEN Age BETWEEN 18 AND 24 THEN '18-24'  
        WHEN Age BETWEEN 25 AND 34 THEN '25-34'  
        WHEN Age BETWEEN 35 AND 44 THEN '35-44'  
        WHEN Age BETWEEN 45 AND 54 THEN '45-54'  
        WHEN Age BETWEEN 55 AND 64 THEN '55-64'  
        ELSE '65+'  
    END;
```