Credit Card Payments & Rewards

In the AwardWallet app, User can make a payment towards the credit card bill and in return, user will get coins corresponding to the payment amount. These coins can be used to purchase rewards.

The payment is technically referred to as "Order"
The act of purchasing the reward is referred to as "Claim".

We here provide you with 3 different tables:

public.user_schema_users: This table lists all of our user base

1. id – user id of the user
2. first_name
3. last_name
4. email
5. gender
6. created_at –The date on which the user downloaded and signup on the app

public.reward_service_reward_usages: This table lists the rewards claimed on our platform.

1. id – primary key for the table
2. reward_usage_id – unique key everytime a user claims a reward
3. reward_id – reward id of the reward the user intents to claim
4. user_id – user_id of the user
5. status – status of the claim action on the app
    a. completed – successfully claimed the reward
    b. processing – state after claim action but before successful completion, this is while the backend system is allocating the reward.
    c. failed – status when a user attempts to claim a reward and has lesser coins than the value of the reward
    d. created – when the user attempts to claim a reward but is yet to be processed on the backend system.
6. created_at – the time when the user attempts claiming a reward on the app.

public.wallet_service_orders : This table lists all the payment orders placed on the AwardWallet app.

1. id – primary key for the table
2. order_id – unique key everytime a user places a payment order on the platform
3. amount – Amount for which the payment order was placed.
4. user_id – user_id of the user
5. status – status of the orders placed by the user
    a. processing – we are processing the order
    b. completed – order is complete, the payment now reflects in the user's credit card account
    c. failed – status when a user keys in wrong OTP/password/CVV
    d. created – stage when the user creates an order
    Eg. I initiate a payment on the AwardWallet platform, there is a new entry in the orders table. This starts with a 'created' status in the table. Once I go to the payment screens, start to enter MPIN the order status updates to processing state. The user if enters incorrect MPIN, payment status updates to 'failed' status and if correct, updates to
    'completed' status.
6. created_at – the time when the user places the order on the app

Your task is to analyse this response data and provide a few reports based on the questions below. For each report, please include SQL queries you may have run. All timestamps in the data set are in GMT.

Your report can be in whatever form you like (ppt, google slides, PDF, word doc, etc.)

1. Create a base fact table, following columns are mandatory, include more if you can think of any. Report all in IST for the ease of use for others
    a. User_id
    b. First_name
    c. Last_name
    d. Gender
    e. Email
    f. Signup date
    g. First payment date
    h. First payment status
    i. Last payment date
    j. Last payment status
    k. Total amount paid
    l. First payment amount
    m. Last payment amount
2. How many users have *never* paid on AwardWallet platform?
3. How many users have *never* claimed a reward on AwardWallet platform?
4. Write a query to find the cumulative amount paid till each date on the AwardWallet platform. Avoid using window functions.
5. Write a query to find DAU (DAU for a day is the count of active users for that day) for *each day*. An active user is the one who has paid on the AwardWallet platform.