Data Description:

Performance data of 4 Facebook pages is provided for analysis. The data pertains to the period ranging from 1 June 2021 to 31 July 2021. There are a total of 12 columns in the sheet in the order: Post Creation Date, Page ID, Post ID, Post creation time, Video length (s), Post reach, Post reactions, Post comments, Post shares, Video views, Completed video views, Avg. video view time (s).

Applicants are required to use Excel/ Python to solve Questions. Please share the Python code used and final output in excel/pdf format.

Questions:

1. Prepare a week-on-week performance summary of the Facebook pages mentioned in the sample data.
2. Identify the post with the highest cumulative watch time for each page for the data set of 61 days. Show results in the form of a table with the following fields - post ID, date of publishing, time of publishing, video length, total watch time.
3. Identify the hour of the day based on the ‘time of post creation’ which yields the minimum shares per post.
4. Prepare a chart to trace the daily performance of each page in the sample data split across video and non-video posts.
5. In the second week of June 2021, which Facebook page has the highest average shares per post?
6. Identify which type of post yields the best performance and based on what metric?
7. If the team wants to improve the performance of the Facebook page FB002, which metric should they focus on?
8. Derive at least two qualitative insights from the sample data that can help the team to improve the performance of the Facebook pages.