Milestone 2: Your Solutions to half of the questions. (30)
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Question 1: "What are the peak hours for viewership on YouTube?" Having this information may be useful to users so that they know when the platform is experiencing high traffic and the network may be slowing down. This could also be helpful for the developers to understand user behavior and plan the maintenance around the peak viewership hours.

Question 2: "What are the most watched videos on YouTube and what time are they watched?" This data can help content consumers come up with ideas for new videos and strategically plan their release times to reach a larger audience. We can use knowledge learnt from class to find a list of most watched videos on YouTube and what time they are watched using SQL.

Question 3: "Based on the top 5 most popular genres, how would you say the users utilize youtube as a resource ?" This data is one that can help us observe user behaviors and determine how the platform is being utilized. If the most popular are used for entertainment over educational, we can assume that the users are utilizing it as a social media or a media consumer platform.

Question 4: "Which category of videos is most popular and which time of year is it watched?"
This question would help the system managers and content creators of a company help determine what videos to advertise during various times throughout the year, what type of content will be more popular and increase track user engagement. We can accomplish this by using what we learned in class to find the categories of videos that are most searched during different times of year.

Question 5: "Which popular artists or youtubers are releasing content soon?"
This would help site managers of a streaming and content creation platform predict and prepare for more traffic on certain pages. It would also help other content creators determine when the best time to release their own videos is. We could accomplish this by using what we learned in class, define functions, to track and predict content creators next release dates by finding the dates of their previous content releases

Question 6: "How does the genre of videos change during different times of the year?"
This question would help system managers determine which musical content will be more popular during different holidays, potentially prepare for an influx of uploads in that type of music, and how to monetize and advertise for different businesses using these popular videos. We could do this by using what we learned in class to distinguish the gaming, music, and other content that tend to be released during holidays.

Question 7: "What are the top 10 trending genres watched?" This question can be answered by using youtube search history to observe the most searched keywords. This information can help content creators come up with names and tags for videos that correlate with trending keywords to appear when they are searched. This can be achieved using content taught in class, such as the count function.

Question 8: "What type of video duration content are users mostly consuming?"
With youtube, there are different duration of videos, including the youtube shorts versions. Having access to the type of media that is being consumed can help the user determine their watching habits, such as doom scrolling, to possibly help make changes to their lifestyle. This can be done using concepts from class to extract the duration of videos and comparing them by ranges of video lengths to see which ones are the most consumed.

Question 9: "Are the videos being watched primarily from youtubers that are subscribed to, or are they all different content that is recommended?" This information can be useful to determine not only the user baja our, but how the platform algorithm is changing to be tailored to view history rather than just content that the users have subscribed to. These can be achieved using knowledge from the course to look at the channels the user is subscribed to as well as the creators of the videos that were watched.

Question 10: "Is the content the user consuming diverse, or are they all from primarily a specific genre?" This question can help get insight on the behavior of the user and the type of media that they consume can determine how they use Youtube as a platform. If the videos are primarily music, then the application is used as a music app, if the content is educational it can be inferred that they use Youtube as a search engine, etc. This information can be important to Youtube as they can determine which videos to recommend to the user based on how they use the platform and the genres that they are mostly watching. This can be done using class concepts to extract the

video category type from the users watch history and see which one is the most popular.

The solutions you have implemented, labeled by the corresponding questions.
- Describe your teamwork: how did you come up with the 10 questions, list the contribution of each team member

The work was divided to every member, and some of the questions were rewritten together once we reevaluated the goals of the database and what we wanted to know. Daniella focused on generating the dummy data utilizing AI and then everyone worked on creating scripts to load the data into the oracle database. Daniella did the Users and the Search History scripts, Victoria did the Videos table, and Sarah did the Watch History scripts. We worked together to write the script to create the tables.