**BigData**

**Goal**

1. **Identify Channels with a High Variation in Monthly Earnings**

SELECT

Youtuber,

(stddev\_samp(highest\_monthly\_earnings) - stddev\_samp(lowest\_monthly\_earnings)) / AVG(highest\_monthly\_earnings + lowest\_monthly\_earnings) \* 100 AS monthly\_earnings\_variation

FROM

YouTubeChannels

WHERE

highest\_monthly\_earnings IS NOT NULL AND lowest\_monthly\_earnings IS NOT NULL

GROUP BY

Youtuber

ORDER BY

monthly\_earnings\_variation DESC;

1. **Evaluate how efficiently each video generates revenue based on views**.

SELECT

Youtuber,

Title,

video\_views,

(highest\_monthly\_earnings - lowest\_monthly\_earnings) / NULLIF(video\_views, 0) AS revenue\_per\_view

FROM

YouTubeChannels

WHERE

highest\_monthly\_earnings IS NOT NULL

AND lowest\_monthly\_earnings IS NOT NULL

AND video\_views IS NOT NULL

ORDER BY

revenue\_per\_view DESC;

1. **Channels with High Engagement Relative to Subscribers**

SELECT Youtuber, (likes + comments) / subscribers \* 100 AS engagement\_per\_subscriber

FROM youtube\_data

ORDER BY engagement\_per\_subscriber DESC

LIMIT 10;

1. **Analyze the performance of various channel categories by assessing the total number of video views they generated in the last 30 days.**

SELECT channel\_type, SUM(video\_views\_for\_the\_last\_30\_days) AS total\_views\_last\_30\_days  
FROM youtube\_data  
GROUP BY channel\_type;

1. **Average Views per Video for Top 3 Education Channels**  
   SELECT Youtuber, video\_views / uploads AS avg\_views\_per\_videoFROM youtube\_dataWHERE category = 'Education'ORDER BY avg\_views\_per\_video DESCLIMIT 3;
2. **Top 5 Channels with the Most Monthly Earnings per Video**

SELECT Youtuber, highest\_monthly\_earnings / uploads AS earnings\_per\_videoFROM youtube\_dataORDER BY earnings\_per\_video DESCLIMIT 5;

1. **Identify channels that have experienced substantial growth over the past year by analyzing the percentage change in subscribers.**

SELECT Youtuber, ((subscribers - subscribers\_for\_last\_30\_days) / subscribers\_for\_last\_30\_days) \* 100 AS yearly\_growth\_rateFROM youtube\_dataORDER BY yearly\_growth\_rate DESCLIMIT 5;

1. **Channels with the Highest Subscribers-to-Views Ratio**

SELECT Youtuber, subscribers / video\_views AS subscribers\_to\_views\_ratioFROM youtube\_dataORDER BY subscribers\_to\_views\_ratio DESCLIMIT 3;