

YouTube Analysis

YouTube Engagement Case Study



Tables Preview



youtube_channels Table

channel_id	channel_name	category	subscribers	avg_views	nox_score
1	MrBeast	Entertainment	370M	187.67M	0.5
2	T-Series	Music	288M	336.88K	48.2
3	Cocomelon - Nursery Rhymes	Education	190M	2.95M	0.8
4	SET India	Entertainment	182M	15.61K	4.3
5	Vlad and Niki	Entertainment	135M	3.44M	24.3
6	Kids Diana Show	Entertainment	131M	4.2M	8.5
7	Like Nastya	Entertainment	126M	15.04M	4.8
8	Stokes Twins	People & Blogs	116M	77.77M	5.4
9	Zee Music Company	Music	115M	1.37M	467.1
10	PewDiePie	Gaming	110M	2.98M	0.9

channel_videos Table

video_id	channel_id	video_title	upload_date	views	likes	comments
1	1	Epic Challenge Video	2024-03-01	15,000,000	500,000	10,000
2	2	Best Bollywood Songs	2024-02-15	3,000,000	250,000	5,000
3	3	Kids Learning ABC	2024-01-10	5,000,000	200,000	8,000
4	4	Comedy Skit Compilation	2024-03-05	2,000,000	150,000	3,000
5	5	Vlad and Niki Adventure	2024-02-22	6,000,000	180,000	4,000
6	6	Diana's New Toys	2024-01-30	4,000,000	175,000	3,500
7	7	Fun Family Vlog	2024-02-18	3,500,000	190,000	4,500
8	8	Crazy Stunts Compilation	2024-03-01	8,000,000	210,000	7,000
9	9	Top Music Hits 2024	2024-02-10	1,000,000	50,000	2,000
10	10	Gaming Livestream Highlights	2024-01-20	2,500,000	120,000	6,000

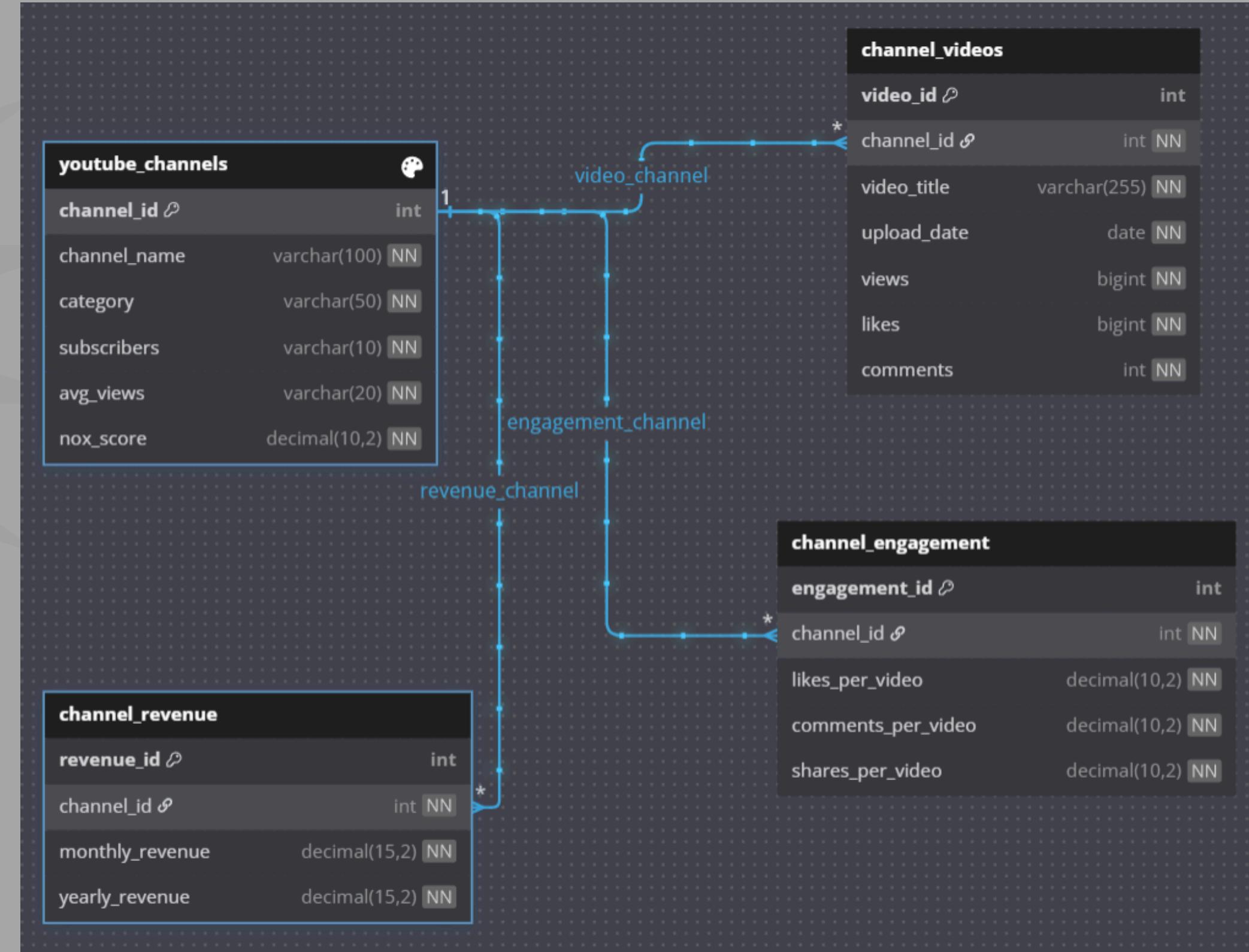
channel_engagement Table

engagement_id	channel_id	likes_per_video	comments_per_video	shares_per_video
1	1	450,000.50	12,000.75	30,000.25
2	2	300,000.20	10,000.00	25,000.10
3	3	200,000.15	8,000.25	20,000.50
4	4	150,000.75	5,000.60	18,000.80
5	5	180,000.50	4,000.90	15,000.60
6	6	175,000.35	3,500.75	14,000.40
7	7	190,000.45	4,500.85	17,000.20
8	8	210,000.30	7,000.25	20,000.35
9	9	50,000.00	2,000.75	5,000.80
10	10	120,000.90	6,000.35	9,000.50

channel_revenue Table

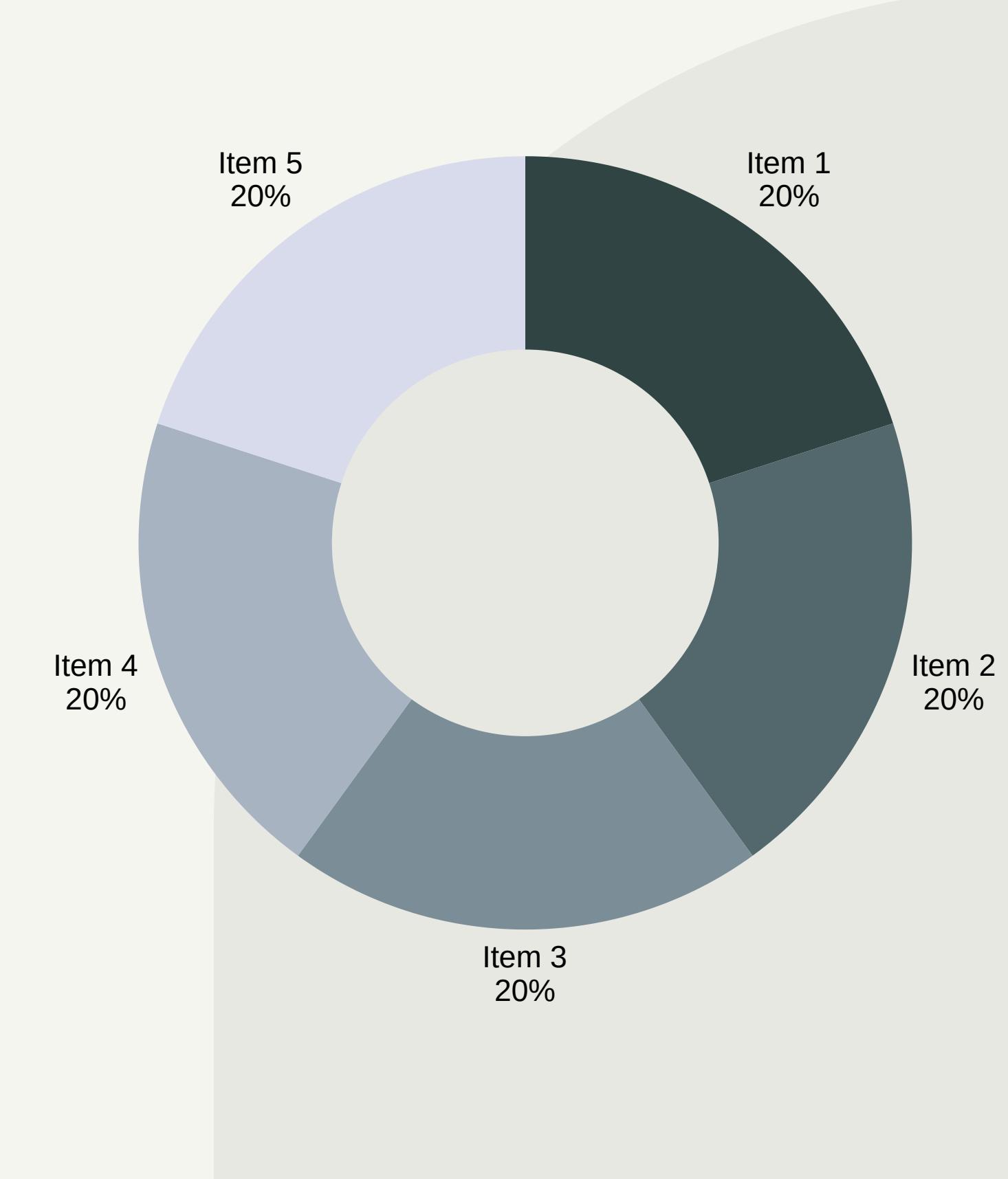
revenue_id	channel_id	monthly_revenue	yearly_revenue
1	1	5,000,000.00	60,000,000.00
2	2	4,500,000.00	54,000,000.00
3	3	1,500,000.00	18,000,000.00
4	4	1,200,000.00	14,400,000.00
5	5	900,000.00	10,800,000.00
6	6	850,000.00	10,200,000.00
7	7	800,000.00	9,600,000.00
8	8	780,000.00	9,360,000.00
9	9	750,000.00	9,000,000.00
10	10	700,000.00	8,400,000.00

SCHEMA PREVIEW



PROBLEM STATEMENTS

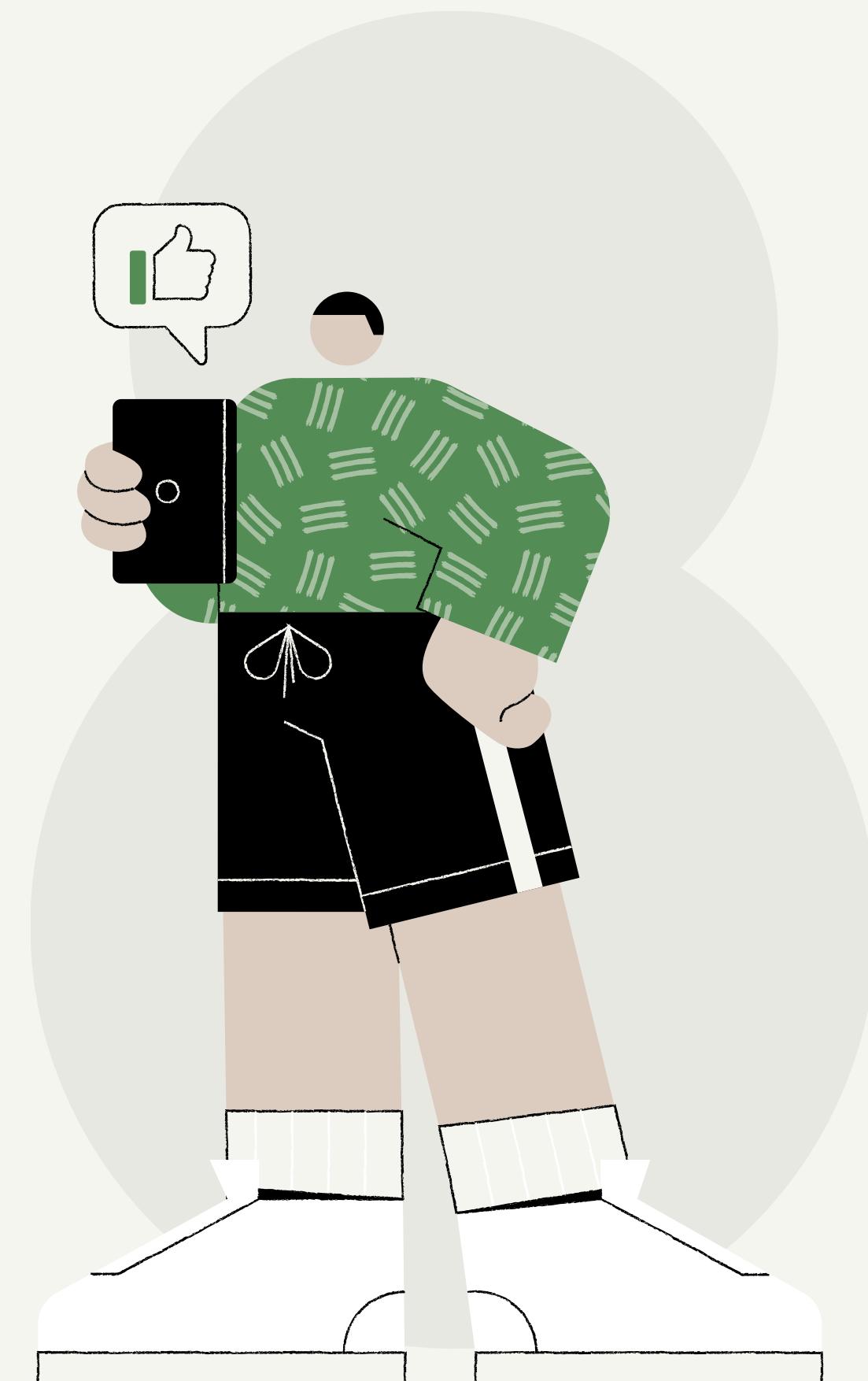
- Get the top 5 most subscribed YouTube channels ?
- Find the total yearly revenue of all channels ?
- Find the video uploaded by 'MrBeast' ?
- Get the average engagement (likes & comments) per video for each channel ?
- List channels that have a NOX score higher than 10 ?
- Find the most commented video ?
- Count the total number of channels in each category ?
- Search for channel names that start with "M" and end with "t" (using Like function) ?
- Find videos uploaded between '2024-03-01' AND '2024-08-01' ?
- 10** Find the top 3 most liked videos on YouTube ?



.Get the top 5 most subscribed
YouTube channels ?

```
SELECT channel_name, subscribers  
FROM youtube_channels  
ORDER BY subscribers DESC  
LIMIT 5;
```

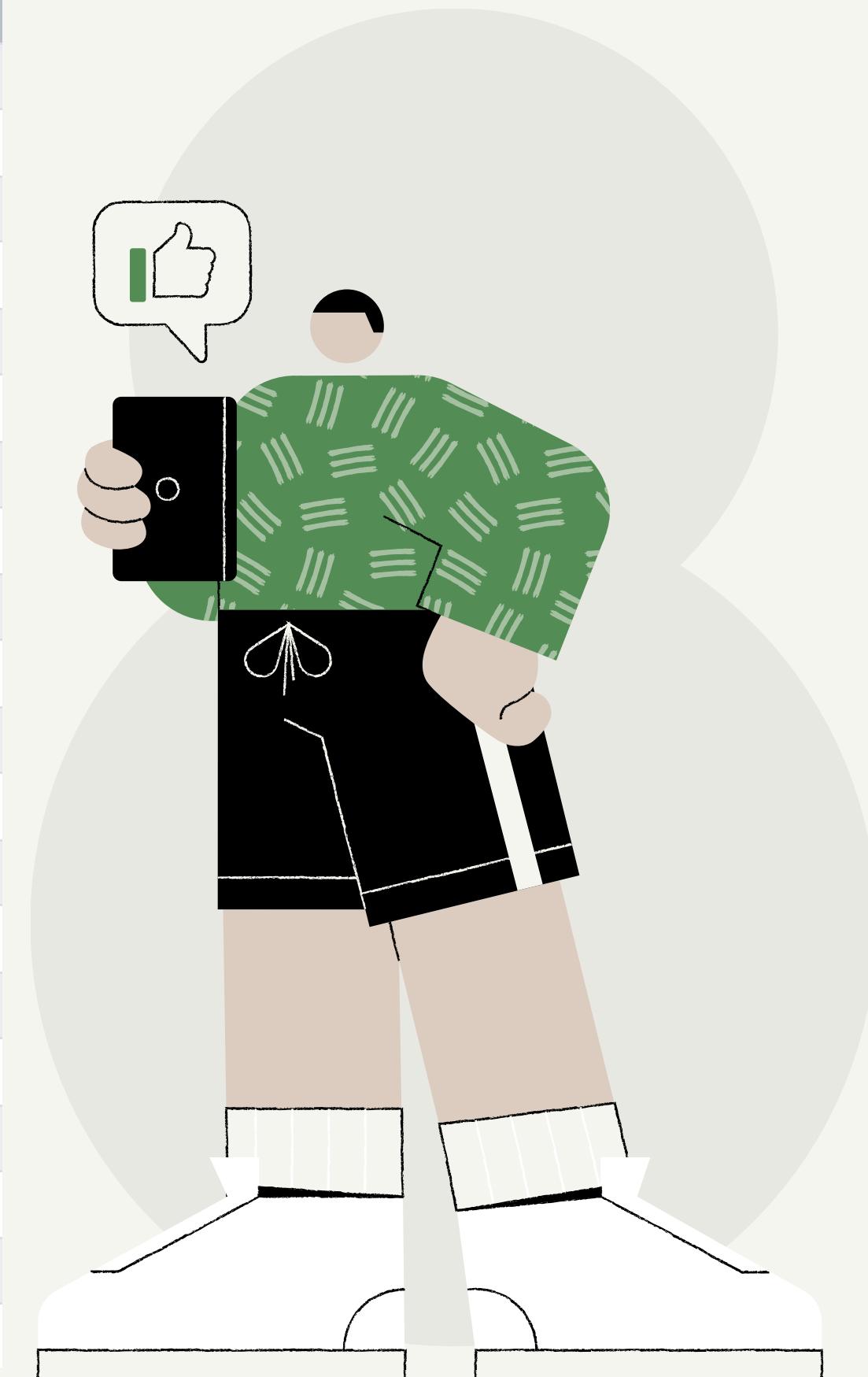
	channel_name character varying (100)	subscribers character varying (10)
1	MrBeast	370M
2	T-Series	288M
3	Cocomelon - Nursery Rhymes	190M
4	SET India	182M
5	Vlad and Niki	135M



	channel_name character varying (100)	revenue numeric (15,2)
1	MrBeast	60000000.00
2	T-Series	54000000.00
3	Cocomelon - Nursery Rhymes	18000000.00
4	SET India	14400000.00
5	Vlad and Niki	10800000.00
6	Kids Diana Show	10200000.00
7	Like Nastya	9600000.00
8	Stokes Twins	9360000.00
9	Zee Music Company	9000000.00
10	PewDiePie	8400000.00
11	MrBeast	60000000.00
12	T-Series	54000000.00
13	Cocomelon - Nursery Rhymes	18000000.00
14	SET India	14400000.00
15	Vlad and Niki	10800000.00
16	Kids Diana Show	10200000.00
17	Like Nastya	9600000.00
18	Stokes Twins	9360000.00
19	Zee Music Company	9000000.00
20	PewDiePie	8400000.00

.Find the total yearly revenue of all channels ?

```
SELECT yt.channel_name,
cr.yearly_revenue AS revenue
FROM youtube_channels AS yt
JOIN channel_revenue AS cr
ON yt.channel_id = cr.channel_id;
```



.Find the video uploaded by
'MrBeast' ?

```
SELECT yt.channel_name, cv.video_title
FROM youtube_channels AS yt
JOIN channel_videos AS cv
ON yt.channel_id = cv.channel_id
WHERE yt.channel_name LIKE 'MrBeast';
```

	channel_name character varying (100) 	video_title character varying (255) 
1	MrBeast	Epic Challenge Video



.Get the average engagement
(likes & comments) per video for
each channel

```
SELECT yt.channel_name,  
ROUND(AVG(ce.likes_per_video),2) AS  
avg_likes,  
ROUND(AVG(ce.comments_per_video),2)  
AS avg_cmmnts  
FROM youtube_channels AS yt  
JOIN channel_engagement AS ce  
ON yt.channel_id = ce.channel_id  
GROUP BY yt.channel_name;
```

	channel_name character varying (100)	avg_likes numeric	avg_cmmnts numeric
1	Zee Music Company	50000.00	2000.75
2	Stokes Twins	210000.30	7000.25
3	Vlad and Niki	180000.50	4000.90
4	SET India	150000.75	5000.60
5	T-Series	300000.20	10000.00
6	MrBeast	450000.50	12000.75
7	Like Nastya	190000.45	4500.85
8	Kids Diana Show	175000.35	3500.75
9	Cocomelon - Nursery Rhymes	200000.15	8000.25
10	PewDiePie	120000.90	6000.35



.List channels that have a NOX score higher than 10 ?

```
SELECT channel_name, nox_score  
FROM youtube_channels  
WHERE nox_score > 10  
ORDER BY nox_score DESC;
```

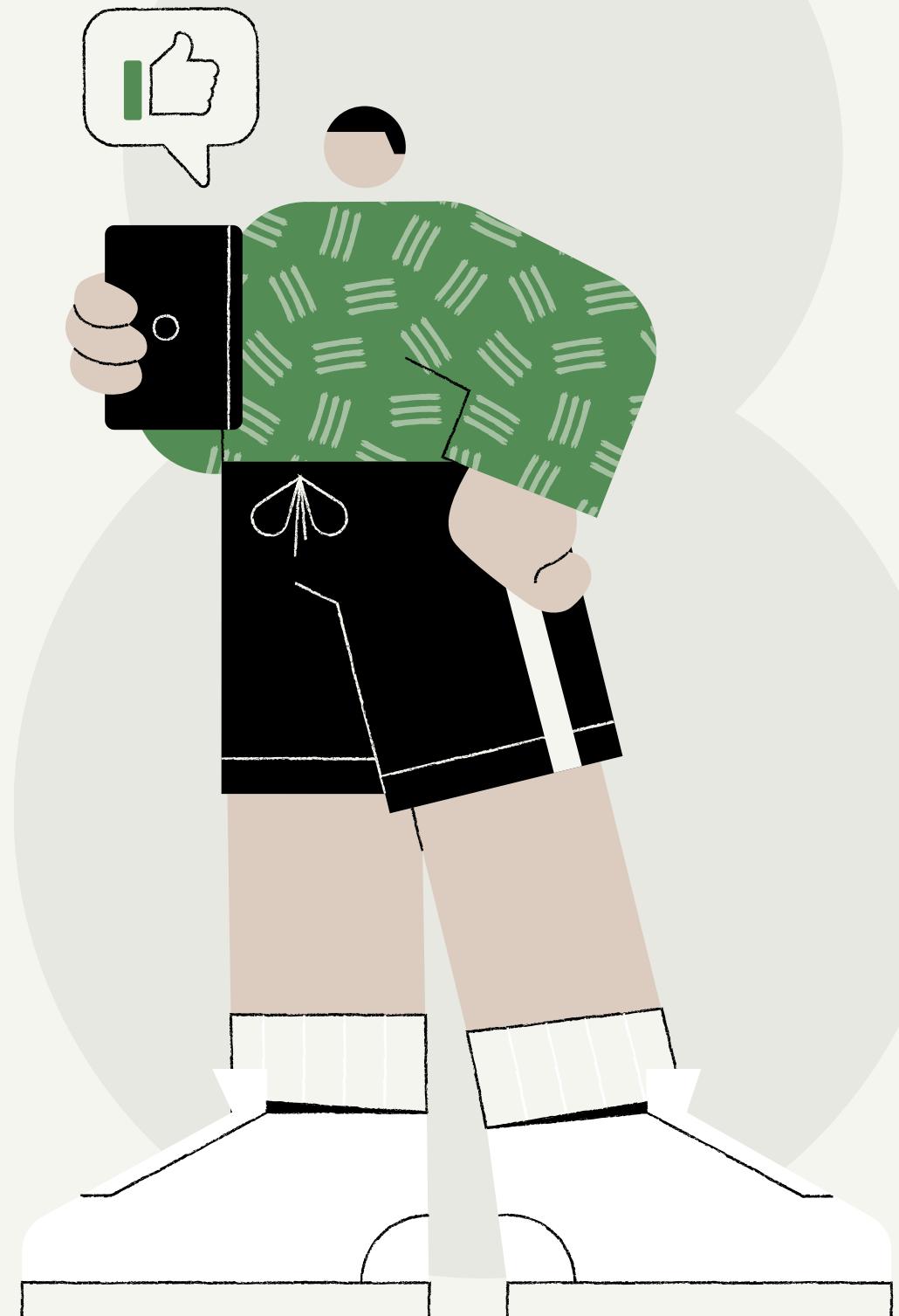
	channel_name character varying (100)	nox_score numeric (10,2)
1	Zee Music Company	467.10
2	T-Series	48.20
3	Vlad and Niki	24.30



.Find the most commented video ?

```
SELECT video_title, comments  
FROM channel_videos  
ORDER BY comments DESC  
LIMIT 1;
```

	video_title character varying (255)	comments integer
1	Epic Challenge Video	10000



.Count the total number of channels in each category ?

```
SELECT category, COUNT(channel_name) AS  
no_of_channel  
FROM youtube_channels  
GROUP BY category;
```

	category character varying (50)	no_of_channel bigint
1	Entertainment	5
2	Gaming	1
3	Music	2
4	People & Blogs	1
5	Education	1



.Search for channel names that
start with "M" and end with "t"
(using Like function) ?

```
SELECT channel_name  
FROM youtube_channels  
WHERE channel_name LIKE 'M%t'
```

	channel_name	character varying (100)
1	MrBeast	

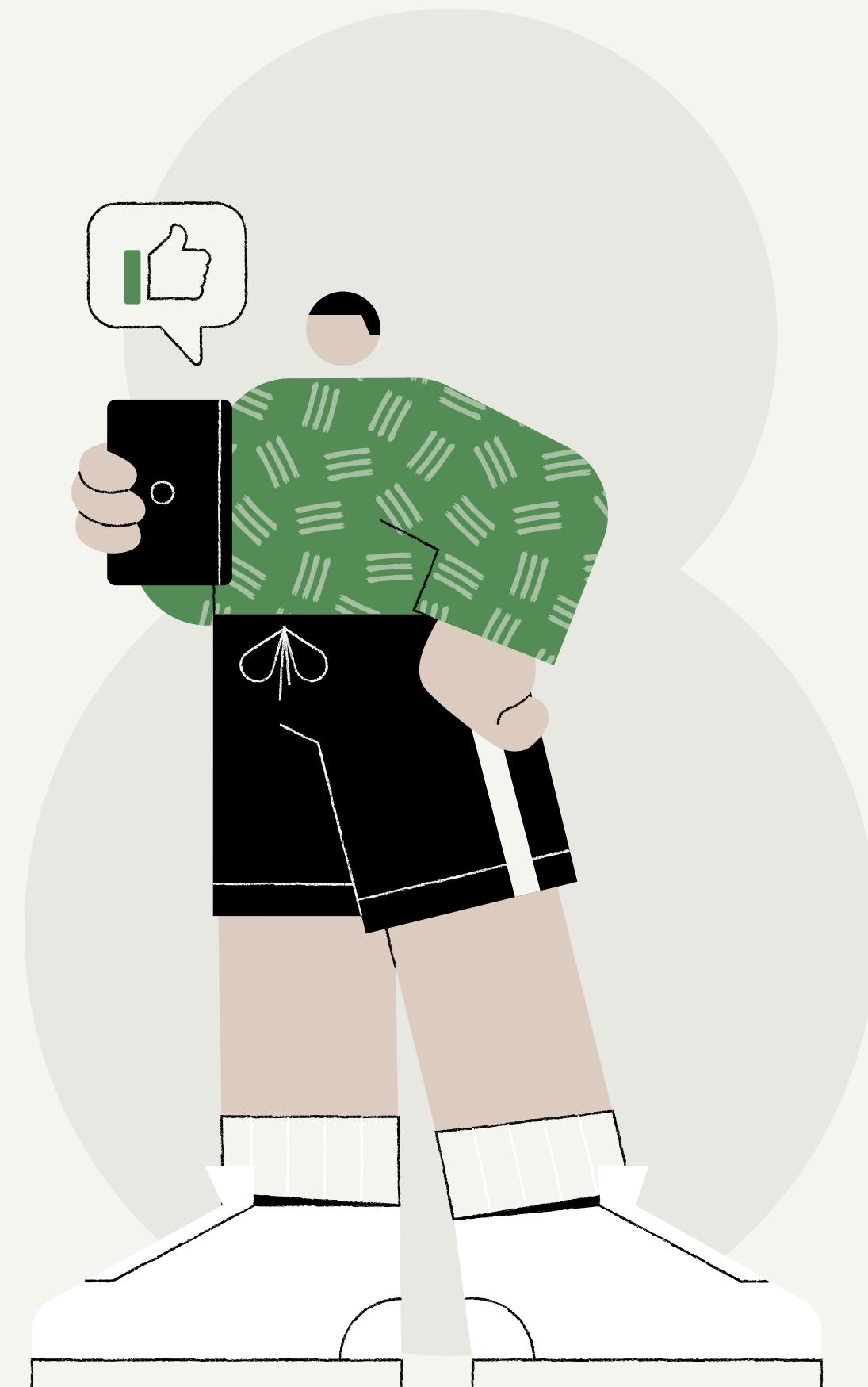


.Find videos uploaded between

'2024-03-01' AND '2024-08-01' ?

```
SELECT video_title, upload_date  
FROM channel_videos  
WHERE upload_date BETWEEN '2024-03-01'  
AND '2024-08-01';
```

	video_title character varying (255) 	upload_date date 
1	Epic Challenge Video	2024-03-01
2	Comedy Skit Compilation	2024-03-05
3	Crazy Stunts Compilation	2024-03-01



10. Find the top 3 most liked videos on YouTube ?

```
SELECT video_title, likes  
FROM channel_videos  
ORDER BY likes DESC  
LIMIT 3;
```

	video_title character varying (255)	likes bigint
1	Epic Challenge Video	500000
2	Best Bollywood Songs	250000
3	Crazy Stunts Compilation	210000

