Advanced SQL Queries

Author:- Azarudhin Usman

Reference:- Youtube - Alex the Analyst video

Introduction:

This document covers SQL topics like Aggregate functions, Joins, Windows Functions and joins.

-- Find SQL related videos

```
select * from alexdata where title_name like '%SQL%';
```

-- Most viewed videos

```
select title_name, sum(views) as total_views from alexdata
group by title_name
order by sum(views) desc;
```

-- Likes to views ratio SQL

```
select title_name, (likes/views) as views_ration from alexdata
group by title_name
order by (likes/views) desc;
```

-- Distinct months where videos are Posted

```
select distinct(yearmonth) from alexdata;
```

-- No of videos posted per month

```
select yearmonth, count(*) from alexdata
group by yearmonth order by count(*) desc;
```

-- Case Statement to See videos per Tool category

```
Select

    case
        when title_name like '%SQL%' then 'SQL'
        when title_name like '%ytho%' then 'Python'
        when title_name like '%xcel%' then 'Excel'
    else
        title_name end as titles

from alexdata;
```

-- Videos with More than million views

```sql
select title_name, views from alexdata where view > 1000000;
```

-- % Change in Number of views using lag function

```sql
SELECT total_views, lag(total_views) over(order by yearmonths) as
previous_views  FROM (
select sum(views) as total_views, EXTRACT('YEAR' FROM YEARMONTH) as
yearmonthsfrom alexdata group by EXTRACT('YEAR' FROM YEARMONTH)) A;
```