World Mining Commodities Project

SQL Based Analysis

About the Project

This project is a comprehensive SQL-based analysis of the mining industry ideal for beginners and intermediate learners.

This project is centered around analyzing them mining industry using real-world dataset from the World Mining Commodities dataset repository. It involoes exploring the mining companies, their operaitonal data, and country-level mining statistics to generate insights and develop SQL proficiency.

Objectives

To analyze global mining trends, understand commodity production levels, and evaluate company performance using **SQL.**

View my full work on GitHub: https://github.com/Aayush-Basnet/31-Day-of-Data-Analytic-Project/tree/main/Day%205%20World%20Minning%20Commodities

SQL Queries

World Mining Commodities SQL*

Limit to 1000 rows

```
10
11      -- Create Database named World_Mining
12 •    Create Database World_Mining;
13
14      -- Importing First Table into the database
15 •    SELECT
16          *
17      FROM
18          116_world_mining_companies_clean;
19
20      -- Importing second table into the database
21 •    SELECT
22          *
23      FROM
24          world_mining_commodities_clean;
25
```

```sql
-- 1. List all unique commodities mined by companies in Table 1.
SELECT DISTINCT
    Commodity
FROM
    table_1;


-- 2. Retrieve the names and websites of all companies operating in Canada.
SELECT
    Name, Website
FROM
    table_1
WHERE
    Location LIKE '%Canada%';
```

```sql
-- 3. List the countries from Table 2 where 'Gold' was mined in 2022.
SELECT
    country
FROM
    Table_2
WHERE
    mined_raw_mat LIKE '%Gold%'
        AND year_2022 > 0;

-- 4. Find the total production of 'Copper' for the year 2020 across all countries
SELECT
    SUM(year_2020) AS total_Copper_Production
FROM
    table_2
WHERE
    mined_raw_mat = 'Copper';


-- 5. Display the name and project stage of companies involved in Diamond mining.
SELECT
    name, `Project Stage`
FROM
    table_1
WHERE
    Commodity LIKE '%Diamond%';

-- 6. Identify the unit of measurement used for 'Nickel' in Table 2.
SELECT DISTINCT
    unit
FROM
    table_2
WHERE
    mined_raw_mat = 'Nickel';
```

```sql
-- 7. List all companies in Table 1 that are in the 'Production' stage.
SELECT
    *
FROM
    table_1
WHERE
    `Project Stage` LIKE '%Production%';

-- 8. Find the top 3 commodities mined in Zimbabwe based on total production in 2021.
SELECT
    mined_raw_mat, SUM(year_2021) AS total_production
FROM
    table_2
WHERE
    country = 'Zimbabwe'
GROUP BY mined_raw_mat
ORDER BY total_production DESC
LIMIT 3;



-- 1. Find the top 5 countries with the highest total production of all commodities combined for 2022.
SELECT
        country,
        SUM(year_2022) total_production_2022
FROM table_2
GROUP BY country
ORDER BY total_production_2022 DESC
LIMIT 5;

-- 2. Retrieve the names of companies operating in both 'Canada' and 'Peru'.
select *
From table_1
where Location = 'Candada'   And Location = 'Peru';
```

```sql
-- 4. Find all companies involved in the mining of at least 3 different commodities.
SELECT
    country
FROM
    table_2
GROUP BY country
HAVING COUNT(DISTINCT mined_raw_mat) >= 3;

SELECT Name
FROM table_1
WHERE Commodity LIKE '%,%,%'  -- Select rows with multiple commodities
GROUP BY Name
HAVING COUNT(DISTINCT TRIM(SUBSTRING_INDEX(Commodity, ',', -1))) >= 3;
```

```sql
-- 5. List the countries that consistently mined 'Platinum' every year from 2018 to 2022.
SELECT  country
FROM table_2
WHERE  mined_raw_mat = 'Platinum'
        AND year_2018 > 0
        AND year_2019 > 0
        AND year_2020 > 0
        AND year_2021 > 0
        AND year_2022 > 0
```