



COP TRACKER: ANALYSING COP EVENTS ACROSS THE GLOBE

Real Time SQL Project With REAL DATASET



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TABLES USED IN THIS PROJECT

1

REGIONS

2

COUNTRIES

3

LEADERS

4

CONFERENCES

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OBJECTIVE

The objective of this project, named COPTracker, is to develop a robust and user-friendly database management system for tracking international conferences related to climate change. The system aims to efficiently manage information about conferences, including their details such as year, location, and regional affiliations.

1) List all countries in the "Asia" region ?

```
SELECT CountryName  
FROM Countries  
JOIN Regions USING(RegionID)  
WHERE RegionName = "Asia";
```

OUTPUT

Query #1 Execution time: 3ms

CountryName
India
Pakistan
Indonesia
Japan
Vietnam

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2) Find the leader of India ?

```
SELECT LeaderName, Title  
FROM Leaders  
JOIN Countries USING(CountryID)  
WHERE CountryName = "India";
```

OUTPUT

Query #2 **Execution time: 0ms**

LeaderName	Title
Narendra Modi	Prime Minister

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3) Count the number of conferences in each region ?

```
SELECT COUNT(ConferenceID) AS NO_OF_CONFERENCE  
      ,RegionalGroups  
FROM Conferences  
GROUP BY RegionalGroups  
ORDER BY COUNT(ConferenceID) DESC;
```

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OUTPUT

Query #3	Execution time: 1ms
NO_OF_CONference	RegionalGroups
9	WEOG
5	Asia Group
5	Africa Group
4	GRULAC
3	Eastern Europe Group
1	Western Europe and Other Group (WEOG)
1	Group of Latin America and the Caribbean (GRULAC)
1	WEOG (COP President: Hungary, Eastern Europe Group)
1	WEOG (COP President: Fiji, Asia Group)
1	WEOG (COP President: Chile, GRULAC)
1	Eastern Europe Group[8]
1	TRC Australia and Pacific Nations

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4) Find conferences held in year 2022 ?



```
SELECT * FROM Conferences  
WHERE Year =2022;
```

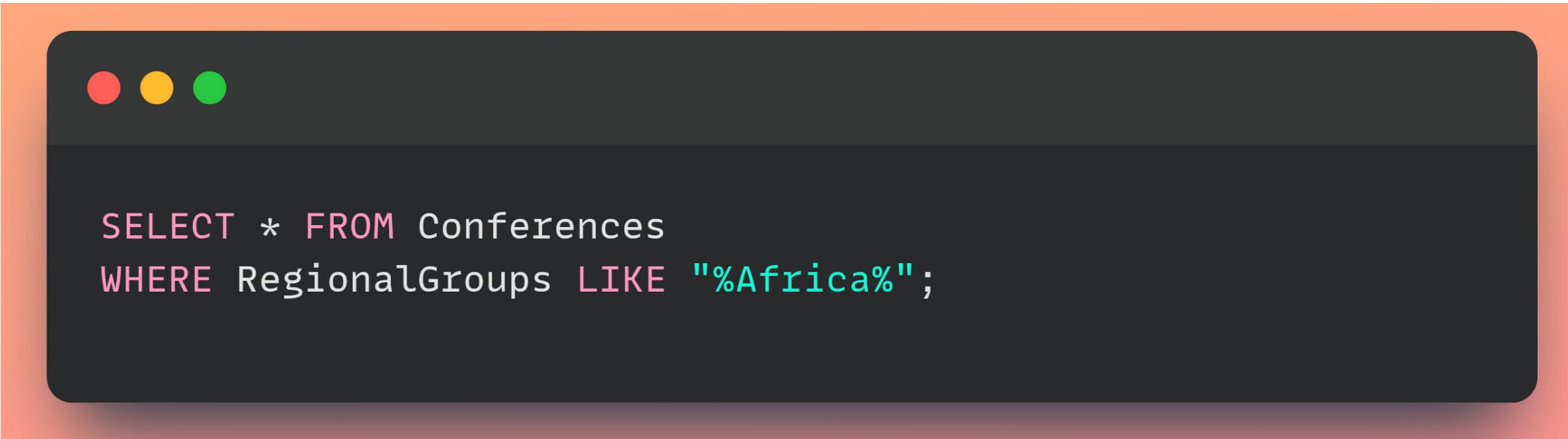
OUTPUT

Query #4 Execution time: 0ms

ConferenceID	Year	Name	AlternativeName	Location	RegionalGroups
29	2022	COP 27	CMP 17 / CMA 4	Sharm El Sheikh	Africa Group

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5) List conferences with regional groups in Africa ?



```
SELECT * FROM Conferences  
WHERE RegionalGroups LIKE "%Africa%";
```

OUTPUT

Query #5 Execution time: 11ms

ConferenceID	Year	Name	AlternativeName	Location	RegionalGroups
8	2001	COP 7	null	Marrakech	Africa Group
13	2006	COP 12	CMP 2	Nairobi	Africa Group
18	2011	COP 17	CMP 7	Durban	Africa Group
23	2016	COP 22	CMP 12 / CMA 1	Marrakech	Africa Group
29	2022	COP 27	CMP 17 / CMA 4	Sharm El Sheikh	Africa Group

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6) List all conferences with alternative names ?

```
SELECT * FROM Conferences  
WHERE AlternativeName IS NOT NULL;
```

OUTPUT

Query #6 Execution time: 0ms

ConferenceID	Year	Name	AlternativeName	Location	RegionalGroups
12	2005	COP 11	CMP 1	Montreal	WEOG
13	2006	COP 12	CMP 2	Nairobi	Africa Group
14	2007	COP 13	CMP 3	Bali	Asia Group
15	2008	COP 14	CMP 4	Poznań	Eastern Europe Group
16	2009	COP 15	CMP 5	Copenhagen	WEOG
17	2010	COP 16	CMP 6	Cancún	GRULAC
18	2011	COP 17	CMP 7	Durban	Africa Group
19	2012	COP 18	CMP 8	Doha	Asia Group
20	2013	COP 19	CMP 9	Warsaw	Eastern Europe Group
21	2014	COP 20	CMP 10	Lima	GRULAC
22	2015	COP 21	CMP 11	Paris	WEOG
23	2016	COP 22	CMP 12 / CMA 1	Marrakech	Africa Group

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7) List all conferences held in a specific location
(e.g., 'Berlin') ?

```
SELECT * FROM Conferences  
WHERE Location = 'Berlin';
```

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OUTPUT

Query #7 Execution time: 1ms

ConferenceID	Year	Name	AlternativeName	Location	RegionalGroups
1	1995	COP 1	null	Berlin	Western Europe and Other Group (WEOG)

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8) Leadership Analysis with Region Labels ?

```
SELECT l.LeaderID  
      ,l.LeaderName  
      ,c.CountryName  
      ,CASE  
          WHEN c.RegionID = 1 THEN 'Europe and USA'  
          WHEN c.RegionID = 2 THEN 'Middle East'  
          WHEN c.RegionID = 3 THEN 'Asia'  
          WHEN c.RegionID = 4 THEN 'Africa'  
          WHEN c.RegionID = 5 THEN 'Latin America'  
          ELSE 'Others'  
      END AS RegionLabel  
FROM Leaders AS l  
JOIN Countries AS c USING (CountryID);
```

OUTPUT

Query #8 Execution time: 0ms

LeaderID	LeaderName	CountryName	RegionLabel
1	King Charles III	United Kingdom	Europe and USA
2	Rishi Sunak	United Kingdom	Europe and USA
3	Emmanuel Macron	France	Europe and USA
4	Humza Yousaf	International Atomic Energy Agency	Others
5	Sheikh Tamim bin Hamad Al Thani	Qatar	Middle East
6	Recep Tayyip Erdogan	Turkey	Middle East
7	Abdel Fattah el-Sissi	Egypt	Middle East
8	Sheikh Mohamed bin Zayed Al Nahyan	United Arab Emirates	Middle East
9	Narendra Modi	India	Asia
10	Anwaar-ul-Haq Kakar	Pakistan	Asia
11	Joko Widodo	Indonesia	Asia
12	Fumio Kishida	Japan	Asia

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9) Find the Difference in Years between the First and Last Conference ?



```
SELECT MAX(Year)- MIN(Year) AS YearDifference  
FROM Conferences;
```

OUTPUT

Query #9

Execution time: 1ms

YearDifference

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10) Show the Next Conference for Each Conference ?

```
SELECT ConferenceID  
      ,Name  
      ,LEAD(Name) OVER(ORDER BY Year ASC) AS NextConference  
  FROM Conferences;
```

OUTPUT

Query #10 Execution time: 0ms

ConferenceID	Name	NextConference
1	COP 1	COP 2
2	COP 2	COP 3
3	COP 3	COP 4
4	COP 4	COP 5
5	COP 5	COP 6
6	COP 6	COP 6-2
7	COP 6-2	COP 7
8	COP 7	COP 8
9	COP 8	COP 9
10	COP 9	COP 10
11	COP 10	COP 11

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11) When and where was the COP 28 conference held?

```
SELECT Name  
      ,Year  
      ,Location  
  FROM Conferences  
 WHERE Name = "COP 28";
```

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OUTPUT

Query #11 Execution time: 0ms

Name	Year	Location
COP 28	2023	Dubai

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12) Combine place and Region for Conference Locations ?

```
SELECT ConferenceID  
      ,Name  
      ,CONCAT(Location, " , ", RegionalGroups) AS Conference_Location  
FROM Conferences ;
```

OUTPUT

Query #12 Execution time: 0ms

ConferenceID	Name	Conference_Location
1	COP 1	Berlin, Western Europe and Other Group (WEOG)
2	COP 2	Geneva, WEOG
3	COP 3	Kyoto, Asia Group
4	COP 4	Buenos Aires, Group of Latin America and the Caribbean (GRULAC)
5	COP 5	Bonn, WEOG
6	COP 6	The Hague, WEOG
7	COP 6-2	Bonn, WEOG
8	COP 7	Marrakech, Africa Group
9	COP 8	New Delhi, Asia Group
10	COP 9	Milan, WEOG (COP President: Hungary, Eastern Europe Group)
11	COP 10	Buenos Aires, GRULAC

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Thank You



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