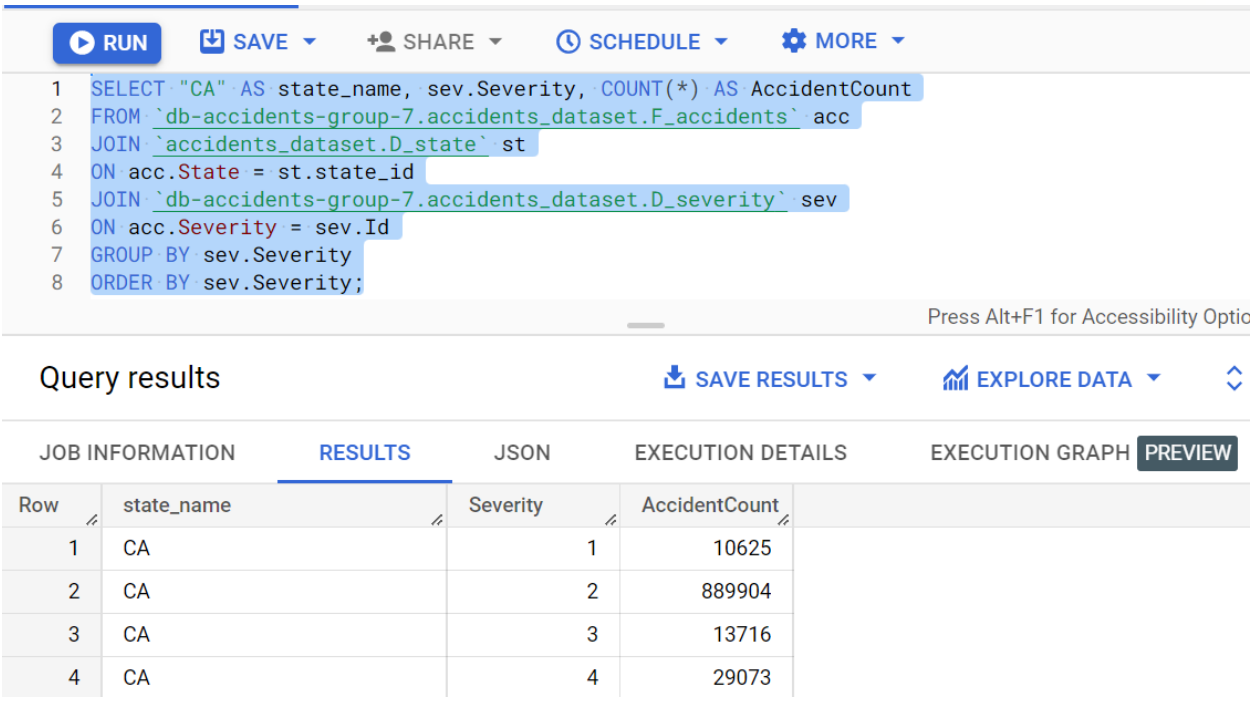
Project Queries

1. Query showing counts of all severity accidents in California state

```
SELECT "CA" AS state_name, sev.Severity, COUNT(*) AS AccidentCount
FROM `db-accidents-group-7.accidents_dataset.F_accidents` acc
JOIN `accidents_dataset.D_state` st
ON acc.State = st.state_id
JOIN `db-accidents-group-7.accidents_dataset.D_severity` sev
ON acc.Severity = sev.Id
GROUP BY sev.Severity
ORDER BY sev.Severity;
```

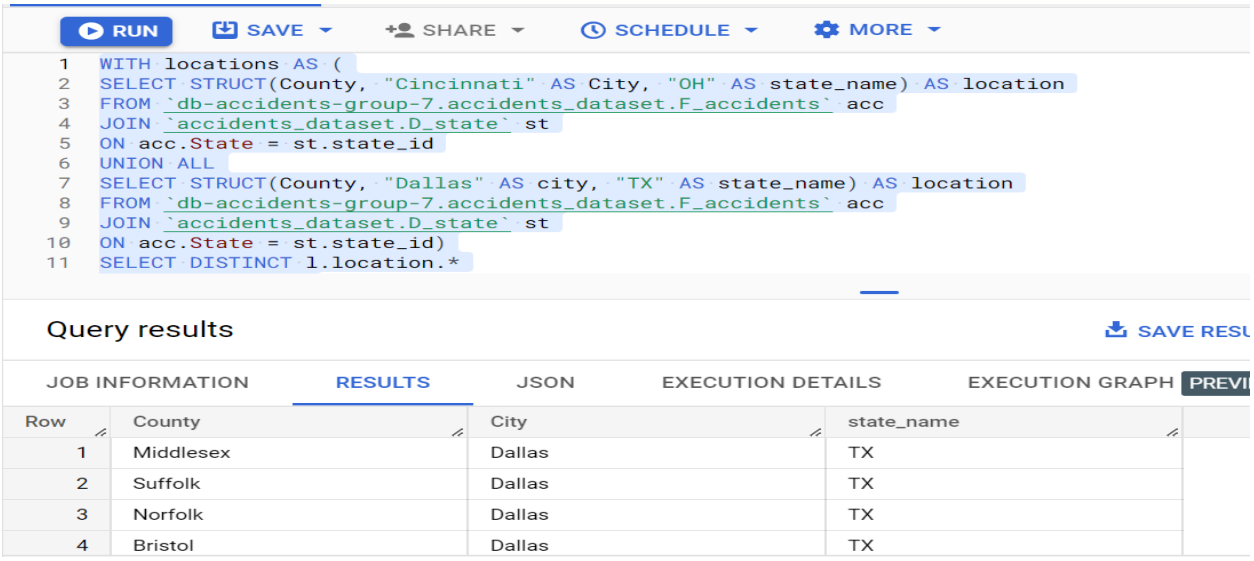
Result –



2. Query to find distinct accident counties of Ohio and Texas.

```
WITH locations AS (
SELECT STRUCT(County, "Cincinnati" AS City, "OH" AS state_name) AS location
FROM `db-accidents-group-7.accidents_dataset.F_accidents` acc
JOIN `accidents_dataset.D_state` st
ON acc.State = st.state_id
UNION ALL
SELECT STRUCT(County, "Dallas" AS city, "TX" AS state_name) AS location
FROM `db-accidents-group-7.accidents_dataset.F_accidents` acc
JOIN `accidents_dataset.D_state` st
ON acc.State = st.state_id)
SELECT DISTINCT l.location.*
FROM locations l;
```

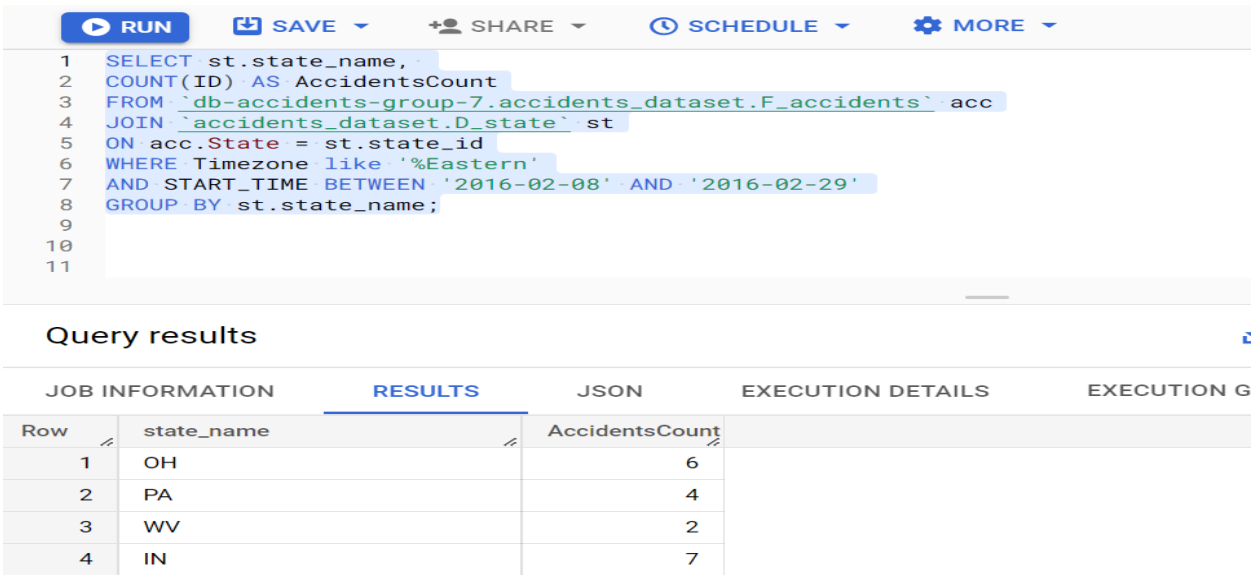
Result –



3. Query accident counts from US Eastern zone in February

```
SELECT st.state_name,
COUNT(ID) AS AccidentsCount
FROM `db-accidents-group-7.accidents_dataset.F_accidents` acc
JOIN `accidents_dataset.D_state` st
ON acc.State = st.state_id
WHERE Timezone like '%Eastern'
AND START_TIME BETWEEN '2016-02-08' AND '2016-02-29'
GROUP BY st.state_name;
```

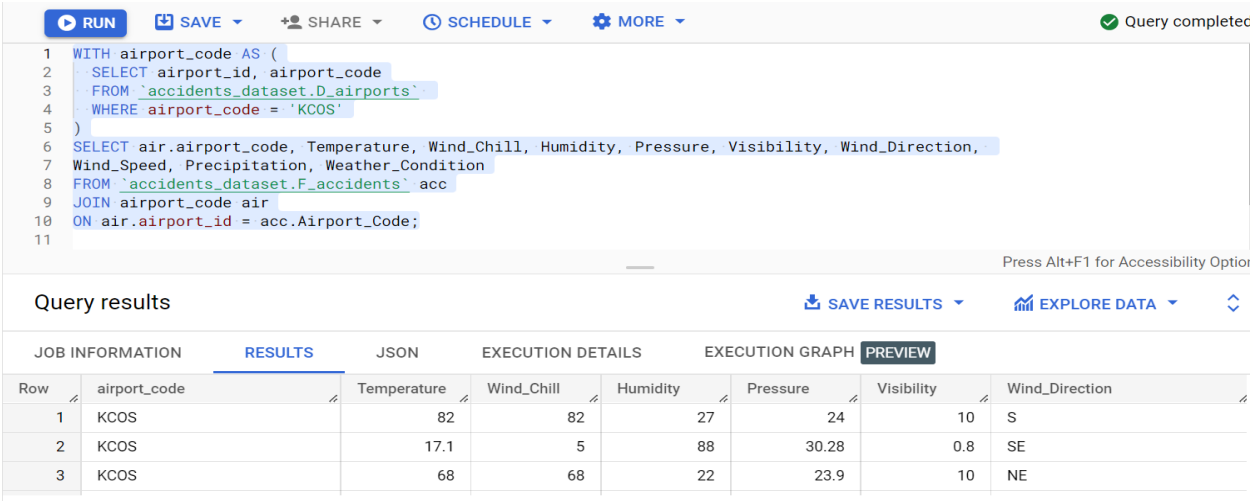
Result –



4. Query to show all weather conditions for airport code KCOS

```
WITH airport_code AS (
  SELECT airport_id, airport_code
  FROM `accidents_dataset.D_airports`
  WHERE airport_code = 'KCOS'
)
SELECT air.airport_code, Temperature, Wind_Chill, Humidity, Pressure, Visibility, Wind_Dir
ection,
Wind_Speed, Precipitation, Weather_Condition
FROM `accidents_dataset.F_accidents` acc
JOIN airport_code air
ON air.airport_id = acc.Airport_Code;
```

Result –

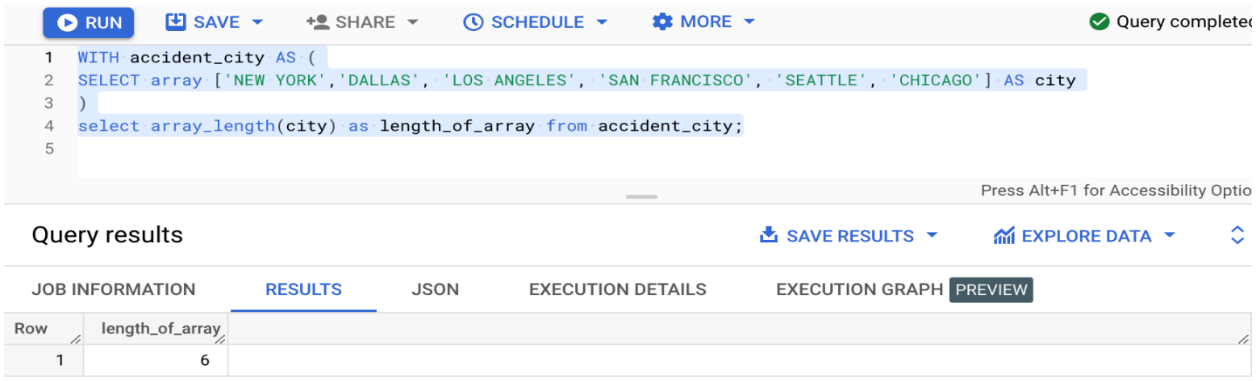


Row	airport_code	Temperature	Wind_Chill	Humidity	Pressure	Visibility	Wind_Direction
1	KCOS	82	82	27	24	10	S
2	KCOS	17.1	5	88	30.28	0.8	SE
3	KCOS	68	68	22	23.9	10	NE

5. Display array length of given Accident cities

```
WITH accident_city AS (
SELECT array ['NEW YORK','DALLAS', 'LOS ANGELES', 'SAN FRANCISCO', 'SEATTLE',
'CHICAGO'] AS city
)
select array_length(city) as length_of_array from accident_city;
```

Result –

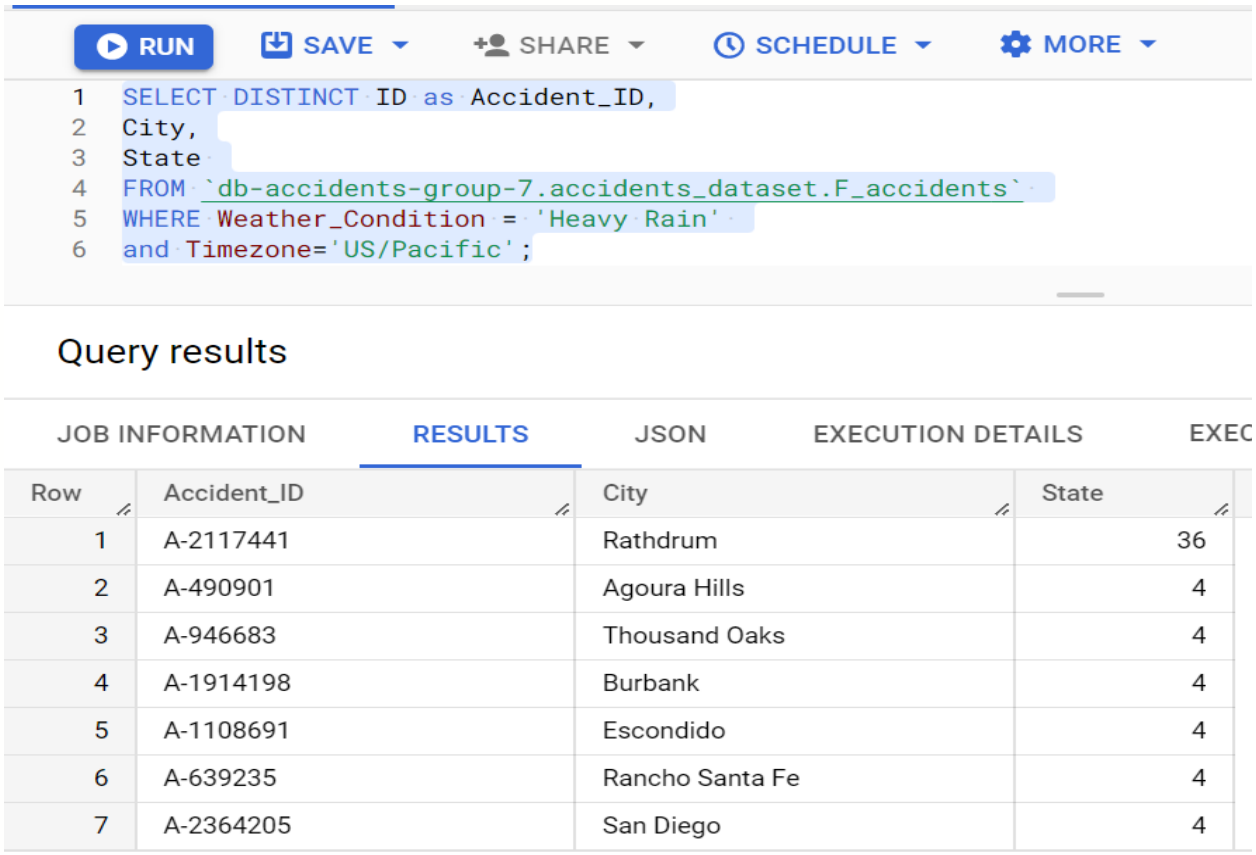


Row	length_of_array
1	6

6. Display all accident IDs, city name and states where the weather condition = Heavy Rain and Time Zone = Us/Pacific

```
SELECT DISTINCT ID as Accident_ID,
City,
State
FROM `db-accidents-group-7.accidents_dataset.F_accidents`
WHERE Weather_Condition = 'Heavy Rain'
and Timezone='US/Pacific';
```

Result -

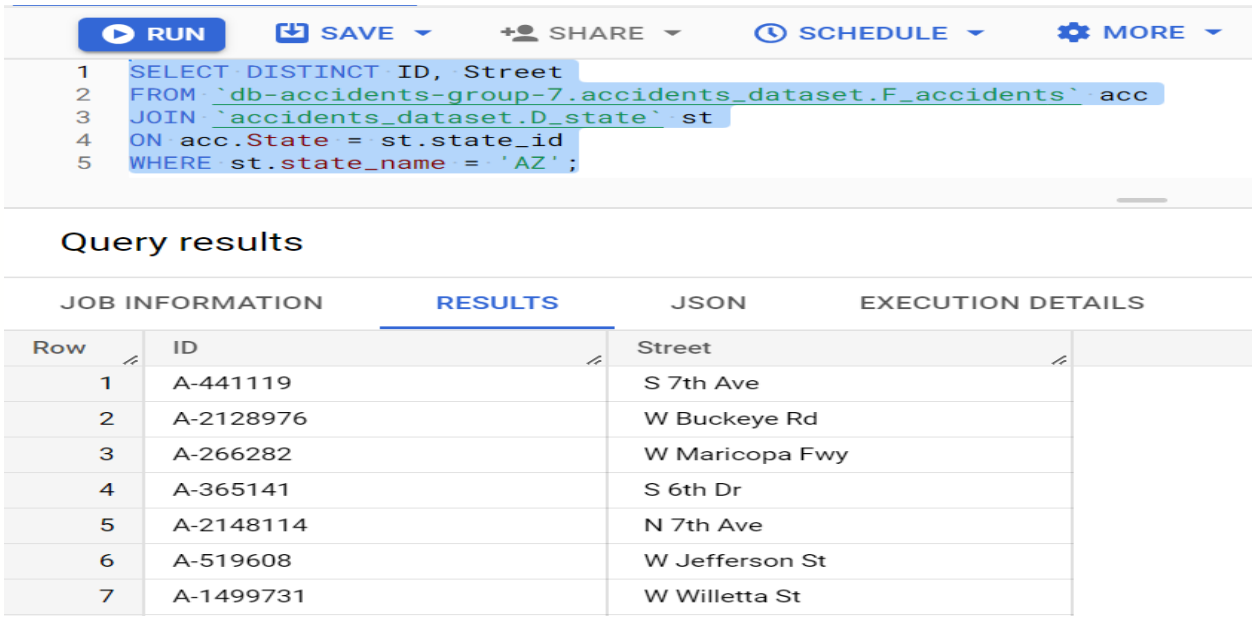


Row	Accident_ID	City	State
1	A-2117441	Rathdrum	36
2	A-490901	Agoura Hills	4
3	A-946683	Thousand Oaks	4
4	A-1914198	Burbank	4
5	A-1108691	Escondido	4
6	A-639235	Rancho Santa Fe	4
7	A-2364205	San Diego	4

7. Query to fetch accident IDs, streets from Arizona state

```
SELECT DISTINCT ID, Street
FROM `db-accidents-group-7.accidents_dataset.F_accidents` acc
JOIN `accidents_dataset.D_state` st
ON acc.State = st.state_id
WHERE st.state_name = 'AZ';
```

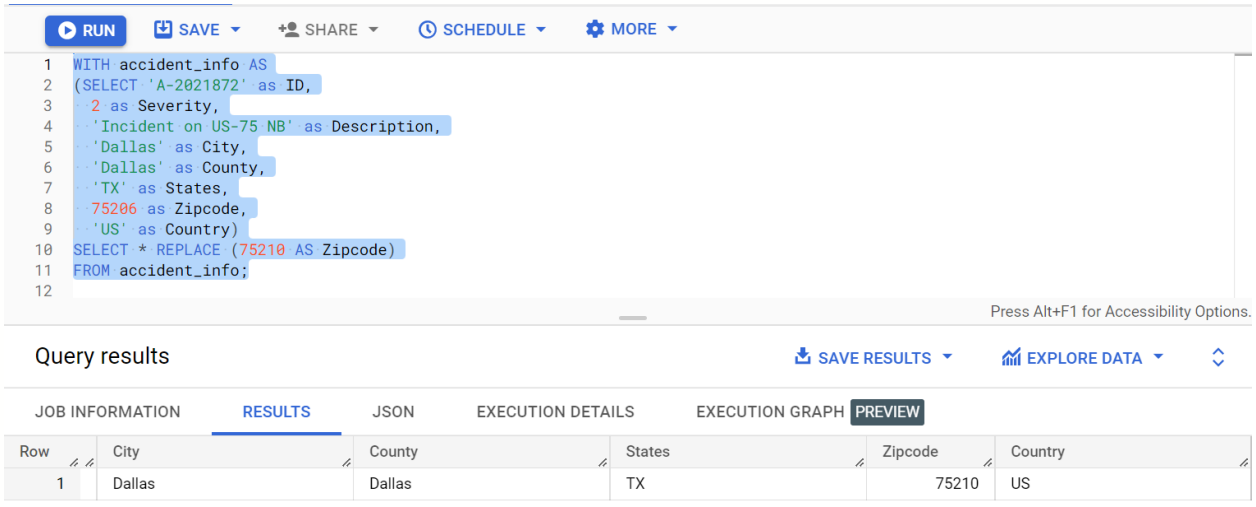
Result –



8. Replacing a Zipcode record in Temporary table

```
WITH accident_info AS
(SELECT 'A-2021872' as ID,
  2 as Severity,
  'Incident on US-75 NB' as Description,
  'Dallas' as City,
  'Dallas' as County,
  'TX' as States,
  75206 as Zipcode,
  'US' as Country)
SELECT * REPLACE (75210 AS Zipcode)
FROM accident_info;
```

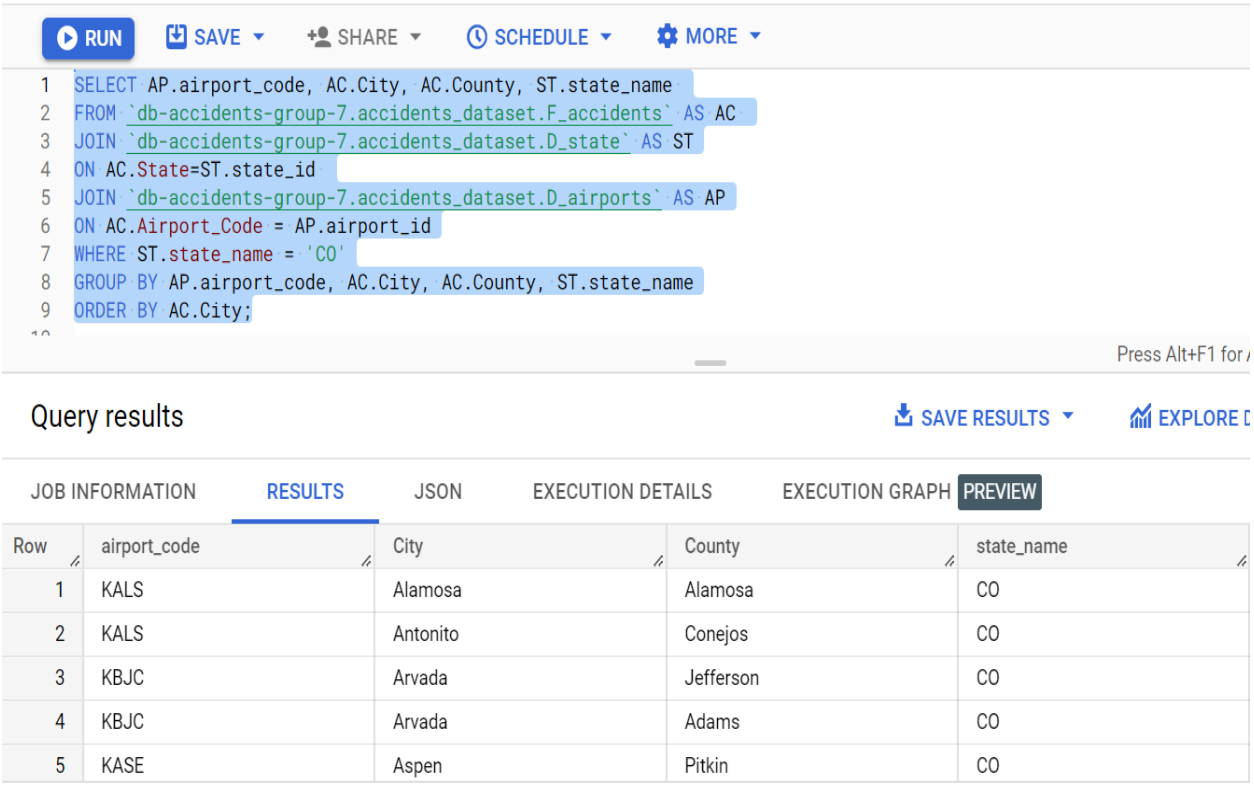
Result –



9. Displaying all airport codes which belong to State Colorado sorted by city.

```
SELECT AP.airport_code, AC.City, AC.County, ST.state_name
FROM `db-accidents-group-7.accidents_dataset.F_accidents` AS AC
JOIN `db-accidents-group-7.accidents_dataset.D_state` AS ST
ON AC.State=ST.state_id
JOIN `db-accidents-group-7.accidents_dataset.D_airports` AS AP
ON AC.Airport_Code = AP.airport_id
WHERE ST.state_name = 'CO'
GROUP BY AP.airport_code, AC.City, AC.County, ST.state_name
ORDER BY AC.City;
```

Result –



Row	airport_code	City	County	state_name
1	KALS	Alamosa	Alamosa	CO
2	KALS	Antonito	Conejos	CO
3	KBJC	Arvada	Jefferson	CO
4	KBJC	Arvada	Adams	CO
5	KASE	Aspen	Pitkin	CO

10. Query to show distinct records where Accident Severity is 4

```
SELECT DISTINCT AC.Severity, AC.State, AC.City, AC.County, AC.Timezone, AC.Weather_Conditi
on
FROM `db-accidents-group-7.accidents_dataset.F_accidents` AS AC
JOIN `db-accidents-group-7.accidents_dataset.D_severity` AS SE
ON AC.Severity = SE.Id
WHERE SE.Severity = 4;
```

Result –

RUN SAVE SHARE SCHEDULE MORE Query completed.

```sql
SELECT DISTINCT AC.Severity, AC.State, AC.City, AC.County, AC.Timezone, AC.Weather_Condition
FROM `db-accidents-group-7.accidents_dataset.F_accidents` AS AC
JOIN `db-accidents-group-7.accidents_dataset.D_severity` AS SE
ON AC.Severity = SE.Id
WHERE SE.Severity = 4;
```

Press Alt+F1 for Accessibility Options.

Query results

SAVE RESULTS EXPLORE DATA

JOB INFORMATION | RESULTS | JSON | EXECUTION DETAILS | EXECUTION GRAPH PREVIEW

Row	Severity	State	City	County	Timezone	Weather_Condit
1	3	17	Great Barrington	Berkshire	US/Eastern	Fair
2	3	17	Lanesborough	Berkshire	US/Eastern	Mostly Cloudy
3	3	17	Quincy	Norfolk	US/Eastern	Cloudy
4	3	43	White River Junction	Windsor	US/Eastern	Partly Cloudy
5	3	43	Bethel	Windsor	US/Eastern	Fair
6	3	43	Chester	Windsor	US/Eastern	Mostly Cloudy
7	3	43	Fair Haven	Rutland	US/Eastern	Light Snow