Find Top Airlines with Delays

carrier_name	total_delayed_flights
Southwest Airlines	22464
American Airlines Network	17390
Delta Air Lines Network	16320
SkyWest Airlines Inc.	14231
United Air Lines Network	11955
JetBlue Airways	6289
PSA Airlines Inc.	5660
Republic Airline	4980
Envoy Air	4456
Alaska Airlines Network	4324
	Southwest Airlines American Airlines Network Delta Air Lines Network SkyWest Airlines Inc. United Air Lines Network JetBlue Airways PSA Airlines Inc. Republic Airline Envoy Air

Find Worst Airports for Delays

	airport_name	total_delayed_flights
١	Dallas/Fort Worth, TX: Dallas/Fort Worth Intern	5870
	Atlanta, GA: Hartsfield-Jackson Atlanta Interna	5774
	Chicago, IL: Chicago O'Hare International	5724
	Charlotte, NC: Charlotte Douglas International	4403
	Denver, CO: Denver International	3842
	Newark, NJ: Newark Liberty International	3298
	Orlando, FL: Orlando International	3153
	San Francisco, CA: San Francisco International	3066
	New York, NY: LaGuardia	3023
	Los Angeles, CA: Los Angeles International	2974

Identify the Main Causes of Flight Delays

	delay_reason	total_minutes
١	Late Aircraft Delay	3925191.00
	Carrier Delay	3224888.00
	NAS Delay	1686136.00
	Weather Delay	734754.00
	Security Delay	14075.00

Total flight delays per month

	month	total_delayed_flights
•	12	132515

Total flight delays per year

	year	total_delayed_flights
•	2024	132515

Which season had the most delays?

season		total_delayed_flights
•	Winter	132515

Which airline had the longest average delay duration?

	carrier_name	avg_delay_minutes
١	Southwest Airlines	12670.3365
	American Airlines Network	11813.5203
	JetBlue Airways	8458.3091
	Delta Air Lines Network	7297.9521
	United Air Lines Network	6749.5378
	PSA Airlines Inc.	5205.8602
	SkyWest Airlines Inc.	5168.1688
	Spirit Airlines	4735.1667
	Frontier Airlines	3626.5301
	Republic Airline	3528.8434

Which airport had the longest total delay time?

	airport_name	total_delay_minutes
•	Dallas/Fort Worth, TX: Dallas/Fort Worth International	552179
	Chicago, IL: Chicago O'Hare International	458530
	Atlanta, GA: Hartsfield-Jackson Atlanta International	399961
	Charlotte, NC: Charlotte Douglas International	363944
	Denver, CO: Denver International	281191
	Newark, NJ: Newark Liberty International	237351
	Houston, TX: George Bush Intercontinental/Houston	234491
	Orlando, FL: Orlando International	225232
	Washington, DC: Ronald Reagan Washington National	220028
	Boston, MA: Logan International	218360

Total delays grouped by cause per year To see if certain delays

	year	carrier_delay	weather_delay	nas_delay	security_delay	late_aircraft_delay
•	2024	3224888.00	734754.00	1686136.00	14075.00	3925191.00

Which month had the highest weather-related delays?

	month	total_weather_delay
•	12	734754.00

Which airline had the highest weather-related delays?

	carrier_name	total_weather_delay
Þ	SkyWest Airlines Inc.	242631.00
	American Airlines Network	98339.00
	Envoy Air	51037.00
	Delta Air Lines Network	48392.00
	United Air Lines Network	44963.00
	Allegiant Air	40771.00
	PSA Airlines Inc.	32394.00
	Southwest Airlines	30541.00
	Piedmont Airlines	27649.00
	Endeavor Air Inc.	19038.00

Which airport had the worst security-related delays?

	airport_name	total_security_delay
١	Dallas/Fort Worth, TX: Dallas/Fort Worth International	755.00
	Las Vegas, NV: Harry Reid International	743.00
	Miami, FL: Miami International	715.00
	Seattle, WA: Seattle/Tacoma International	703.00
	Charlotte, NC: Charlotte Douglas International	544.00
	Fort Lauderdale, FL: Fort Lauderdale-Hollywood International	490.00
	Nashville, TN: Nashville International	444.00
	Denver, CO: Denver International	419.00
	Orlando, FL: Orlando International	411.00
	Minneapolis, MN: Minneapolis-St Paul International	398.00

Percentage of flights delayed vs. total flights

	percentage_flights_delayed
•	20.9694