-- 1. Which manufacturer's planes had most no of flights? And how many flights

select manufacturer, count(*) as NO_of_Planes from planes group by manufacturer order by NO_of_planes desc limit 1;

select p.manufacturer, count(*) as NO_Of_Flights FROM flights f join planes p on f.tailnum = p.tailnum group by p.manufacturer order by p.manufacturer limit 1;

-- 2. Which manufacturer's planes had most no of flying hours? And how many hours

select p.manufacturer, SUM(f.air_time::numeric) as Most_Hours FROM Planes p
Join Flights f
ON p.tailnum = f.tailnum
group by manufacturer
order by Most_hours desc
limit 1;

-- 3. Which plane flew the most number of hours? And how many hours?

SELECT tailnum, SUM(CAST(air_time as decimal)) as Most_No_Of_Hours From flights group by tailnum order by Most_no_of_hours desc limit 1;

-- 4. Which destination had most delay in flights?

SELECT dest, SUM(arr_delay::numeric) as Delay_Time FROM Flights group by dest order by delay_time desc limit 1;

-- 5. Which manufactures planes had covered most distance? And how much distance?

SELECT p.manufacturer, SUM(f.distance) as Most_Distance
From Flights f
JOIN Planes p
ON f.tailnum = p.tailnum
group by p.manufacturer
order by most_distance desc
limit 1:

-- 6. Which airport had most flights on weekends

SELECT airports.Airport, Count(*) as Flight_count
FROM flights

JOIN airports ON flights.origin = airports."IATA_CODE"

WHERE EXTRACT(DOW FROM DATE(year || '-' || LPAD(month::text, 2, '0') || '-' ||
LPAD(day::text, 2, '0'))) IN (0, 6)

GROUP BY airports."AIRPORT"

ORDER BY flight_count DESC;