

Soluções em ANSI-SQL

As soluções descritas aqui foram criadas como auxílio de raciocínio para as perguntas levantadas.

1. Questão
2. Questão
3. Questão
4. Questão

1. Questão

Porcentagem dos voos que atrasam mais de 5 min. por mês e companhia aérea. Qual foi o pior mês para Delta Air Lines Inc.?

```
WITH t AS (  
SELECT  
    flights.month,  
    airlines.name,  
    (SUM(CASE  
        WHEN flights.total_delay > 5  
        THEN 1  
        ELSE 0  
    END) * 100) / COUNT(flights.flight) AS "percentage_delays"  
FROM  
    flights  
LEFT JOIN  
    airlines ON airlines.carrier = flights.carrier  
GROUP BY  
    flights.month,  
    airlines.name  
ORDER BY  
    airlines.month  
)  
  
SELECT  
    month,  
    max(percentage_delays)  
FROM  
    t  
WHERE  
    airlines.name = 'Delta Air Lines Inc.'
```

2. Questão

Quantidade de aviões distintos e voos realizados por fabricante. Qual fabricante possui menos voos?

```

SELECT
    planes.manufacturer,
    COUNT(DISTINCT planes.tailnum) AS "planes",
    COUNT(flights.flight) AS "flights"
FROM
    flights
LEFT JOIN
    planes ON planes.tailnum = flights.tailnum
GROUP BY
    planes.manufacturer
HAVING
    MIN(COUNT(flights.flight))

```

3. Questão

Empresa que mais realizou voos com aviões da Airbus.

```

SELECT
    airlines.name,
    COUNT(flights.flight) AS "flights"
FROM
    flights
LEFT JOIN
    airlines ON airlines.carrier = flights.carrier
LEFT JOIN
    planes ON plane.tailnum = flights.tailnum
WHERE
    planes.manufacturer = 'AIRBUS'
GROUP BY
    airlines.name
HAVING
    MAX(COUNT(flights.flight))

```

4. Questão

Quantidade de voos que os aeroportos receberam entre 18h00 e 22h00 no dia 03-Março.

```

SELECT
    airports.name,
    COUNT(flights.flight) as "flights"
FROM
    flights
LEFT JOIN
    airports ON airports.faa = flights.dest
WHERE
    flights.month = 3

```

```
    AND
      flights.day = 3
    AND
      flights.arr_time BETWEEN 18 AND 22
GROUP BY
  airports.name
```