## Revolve Solutions SQL Assessment

## **Questions-**

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

Planes of Boeing had most number of flights with 1103.

```
select
pl.manufacturer,
count(*) num_flights
from flights f
inner join planes pl
on f.tailnum = pl.tailnum
group by pl.manufacturer
order by num_flights desc
```

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

Boeing's planes had the most number of flying time with 3941 hours.

```
with cte as (
select
pl.manufacturer,
f.air_time::numeric/60 as FlightHours
from flights f inner join planes pl
on f.tailnum = pl.tailnum
where f.air_time != 'NA')
select manufacturer , round(sum(FlightHours), 2) as
TotalFlightHours
from cte group by manufacturer
order by TotalFlightHours Desc
limit 1;
```

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

Plane Number N322AA of American Airlines Inc. flew the most number of hours with 33.97 hours.

```
with cte as (
    select

tailnum, carrier, round(sum(air_time::numeric)/60,2) as FlightHours
    from flights
    where air_time != 'NA'
    group by tailnum, carrier)
    select tailnum, "AIRLINE", flighthours from cte
    inner join airlines air on cte.carrier = air."IATA_CODE"
    order by FlightHours Desc
    limit 1;
```

4. Which destination had most delay in flights?

Savannah/Hilton Head International Airport of Savannah City had most arrival delay in flights with mean arrival delay being 101 minutes

```
select air."AIRPORT", air."CITY",
AVG(f.arr_delay::numeric) as Avg_Delay
from flights f inner join airports air on f.dest = air."IATA_CODE"
where arr_delay != 'NA' group by air."AIRPORT", air."CITY"
order by Avg_Delay desc limit 1;
```

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

Boeing planesx` covered most distance with 1644180.

```
select pl.manufacturer, sum(f.Distance) DistanceCovered from
flights f
inner join planes pl
on f.tailnum = pl.tailnum
group by pl.manufacturer
order by DistanceCovered desc
limit 1;
```

6. Which airport had most flights on weekends?

John F. Kennedy International Airport had most number of flights on weekends with 325.

```
with cte as (
select origin, count(*) num_flights from flights
where trim(to_char(make_date(year,month,day), 'DAY')) in
('SATURDAY','SUNDAY')
group by origin )
select ap."AIRPORT", cte.num_flights from cte
inner join airports ap
on cte.origin = ap."IATA_CODE"
order by cte.num_flights desc
limit 1
```