FLIGHT ACTIVITY

*--the most freq destination airports (2010-2020)*

SELECT \* FROM (

SELECT FLIGHT.ARRIVAL\_AIRPORT, COUNT(FLIGHT.ARRIVAL\_AIRPORT ) AS COUNT

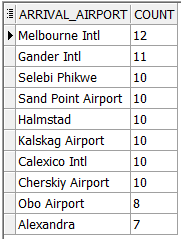
FROM FLIGHT,FLIGHT\_ACTIVITY,DATE

WHERE FLIGHT\_ID = FLIGHT.ID AND BOOKING\_DATE = DATE.DATE\_KEY AND DATE.YEAR BETWEEN 2010 AND 2020

GROUP BY FLIGHT.ARRIVAL\_AIRPORT

ORDER BY COUNT DESC)

WHERE ROWNUM <= 10



*--The proportion of every fare basis the flyers take*

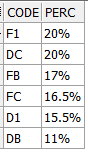
SELECT FARE\_BASIS.CODE , COUNT(FARE\_BASIS.CODE )/(SELECT COUNT(\*) FROM FLIGHT\_ACTIVITY) \* 100 ||'%' AS PERC

FROM FARE\_BASIS,FLIGHT\_ACTIVITY

WHERE FARE\_BASIS\_ID = FARE\_BASIS.ID

GROUP BY FARE\_BASIS.CODE

ORDER BY PERC DESC;



*--how often they upgrade*

SELECT PASSENGER\_ID,COUNT(\*)

FROM (

SELECT DISTINCT PASSENGER\_ID,FARE\_BASIS.CODE , COUNT(FARE\_BASIS.CODE) OVER(PARTITION BY FLIGHT\_ACTIVITY.PASSENGER\_ID, FLIGHT\_ACTIVITY.FARE\_BASIS\_ID) COUNT\_

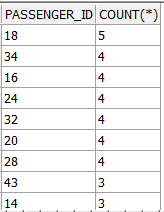
FROM FLIGHT\_ACTIVITY,FARE\_BASIS

WHERE FLIGHT\_ACTIVITY.FARE\_BASIS\_ID = FARE\_BASIS.ID

)

GROUP BY PASSENGER\_ID

ORDER BY count(\*) desc;



*--Calculate average*

SELECT AVG(COUNT) FROM

(SELECT PASSENGER\_ID,COUNT(\*) AS COUNT

FROM (

SELECT DISTINCT PASSENGER\_ID,FARE\_BASIS.CODE , COUNT(FARE\_BASIS.CODE) OVER(PARTITION BY FLIGHT\_ACTIVITY.PASSENGER\_ID, FLIGHT\_ACTIVITY.FARE\_BASIS\_ID) COUNT\_

FROM FLIGHT\_ACTIVITY,FARE\_BASIS

WHERE FLIGHT\_ACTIVITY.FARE\_BASIS\_ID = FARE\_BASIS.ID

)

GROUP BY PASSENGER\_ID)

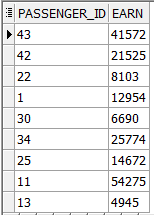


*--how much miles they earn*

SELECT PASSENGER\_ID,SUM(DISTANCE\_IN\_MILES) AS EARN

FROM FLIGHT\_ACTIVITY

GROUP BY PASSENGER\_ID;



*--the proportion of promotion fare vs. full fare*

SELECT

(SELECT COUNT(\*) FROM FLIGHT\_ACTIVITY,FARE\_BASIS WHERE FARE\_BASIS\_ID = ID AND CODE IN ('D1','DB','DC'))

/(SELECT COUNT(\*) FROM FLIGHT\_ACTIVITY) \* 100||'%' AS DISCOUNT\_FARE

,(SELECT COUNT(\*) FROM FLIGHT\_ACTIVITY,FARE\_BASIS WHERE FARE\_BASIS\_ID = ID AND CODE IN ('F1','FB','FC'))/(SELECT COUNT(\*) FROM FLIGHT\_ACTIVITY) \* 100||'%' AS FULL\_FARE

FROM DUAL

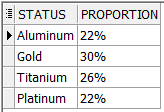


*--proportion of membership status for passengers*

SELECT STATUS,COUNT(STATUS)/ (SELECT COUNT(\*) FROM FREQ\_PASSENGER) \*100||'%'

FROM FREQ\_PASSENGER

GROUP BY STATUS



*--average number of nights they stay in hotels*

UPDATE OVERNIGHT\_STAYS SET NUMBER\_OF\_NIGHTS = DATE\_OF\_DEPARTURE\_KEY - DATE\_OF\_ARRIVAL\_KEY

SELECT AVG(NUMBER\_OF\_NIGHTS) FROM OVERNIGHT\_STAYS



Financial analysis

*--profit per year*

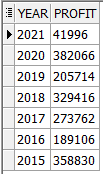
SELECT YEAR,SUM(PAYMENT\_AMOUNT) AS PROFIT

FROM RESERVATION,DATE\_TABLE

WHERE DATE\_ID=KEY

GROUP BY YEAR

ORDER BY YEAR DESC



*--profit per quarter for every year*

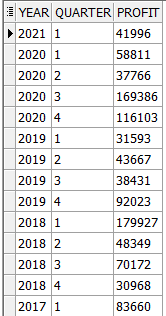
SELECT YEAR,QUARTER,SUM(PAYMENT\_AMOUNT) AS PROFIT

FROM RESERVATION,DATE\_TABLE

WHERE DATE\_ID=KEY

GROUP BY YEAR,QUARTER

ORDER BY YEAR,QUARTER DESC



*--profit per every month for every year*

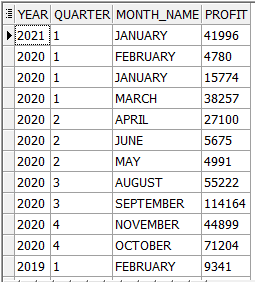
SELECT YEAR,QUARTER,MONTH\_NAME,SUM(PAYMENT\_AMOUNT) AS PROFIT

FROM RESERVATION,DATE\_TABLE

WHERE DATE\_ID=KEY

GROUP BY YEAR,QUARTER,MONTH\_NAME

ORDER BY YEAR,QUARTER,MONTH\_NAME DESC



*--profit from every reservation channel*

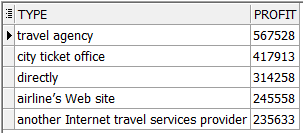
SELECT TYPE, SUM(PAYMENT\_AMOUNT) AS PROFIT

FROM RESERVATION, RESERVATION\_CHANNEL

WHERE ID=RESERVATION\_CHANNEL\_ID

GROUP BY TYPE

ORDER BY PROFIT DESC



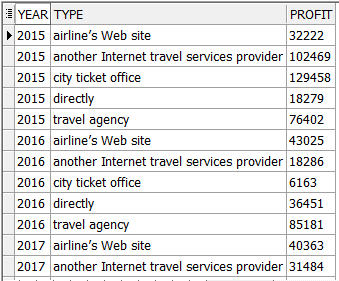
*--profit from every reservation channel for every year*

SELECT YEAR,TYPE, SUM(PAYMENT\_AMOUNT) AS PROFIT

FROM RESERVATION, RESERVATION\_CHANNEL ,DATE\_TABLE

WHERE ID=RESERVATION\_CHANNEL\_ID AND DATE\_ID=KEY

GROUP BY YEAR,TYPE ORDER BY YEAR



CUSTOMER CARE

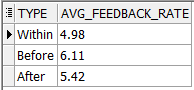
*--average feedback rate before, within and after the flight*

SELECT TYPE, ROUND(AVG(FEEDBACK\_RATE),2) AS AVG\_FEEDBACK\_RATE

FROM CUSTOMER\_CARE,INTERACTION

WHERE INTERACTION\_ID = INTERACTION.ID

GROUP BY TYPE



*--average problem severity before, within and after the flight*

SELECT TYPE,ROUND(AVG(PROBLEM\_SEVERITY),2) AS AVG\_PROBLEM\_SEVERITY

FROM CUSTOMER\_CARE,INTERACTION

WHERE INTERACTION\_ID = INTERACTION.ID

GROUP BY TYPE

