--SQL RESEARCH QUESTIONS--

/\*Question 1: Who are the users that opened an account but have not booked

any flights or reserved any Airbnb listing through the company's platform - “EApp”?\*/

SELECT

UA.USER\_ID,

UA.FIRST\_LAST\_NAME,

UR.TRANSACTION\_DATE,

UR.TRANSACTION\_ID

FROM

USER\_ACCOUNT UA

FULL OUTER JOIN USER\_RECORDS UR

ON UA.USER\_ID = UR.USER\_ID

FULL OUTER JOIN CARD\_DETAILS CD

ON UA.USER\_ID = CD.USER\_ID

WHERE UR.TRANSACTION\_DATE IS NULL AND UR.TRANSACTION\_DATE IS NULL

;

/\*Question 2: What is the booking id, credit/debit card number, and transaction

identifier linked to order number 95?\*/

SELECT

CD.CARD\_NO,

UR.ORDER\_NO,

B.BOOKING\_ID,

UR.TRANSACTION\_ID

FROM

BOOKINGS B

JOIN USER\_RECORDS UR

ON UR.BOOKING\_ID = B.BOOKING\_ID

JOIN CARD\_DETAILS CD

ON CD.USER\_ID = UR.USER\_ID

WHERE UR.ORDER\_NO < 96 AND UR.ORDER\_NO > 94

;

/\*Question 3: Who are the users (account holders) and their respective phone numbers

linked to every, and linked to every purchase or transaction that occurred after April 20, 2016?\*/

SELECT

UA.FIRST\_LAST\_NAME,

UA.USER\_ID,

UA.USER\_PHONE

FROM

USER\_ACCOUNT UA

INNER JOIN EXPEDIA\_PASSENGER\_DATA EPD

ON EPD.PASSENGER\_NAME = UA.FIRST\_LAST\_NAME

INNER JOIN USER\_RECORDS UR

ON UR.USER\_ID = UA.USER\_ID

WHERE UR.TRANSACTION\_DATE > '4/20/2016'

;

/\*Question 4: What is the average overall rating for every Airbnb listing

in each city within the United States?\*/

SELECT

FORMAT(ROUND(AVG(ABD.RATING\_OVERALL),2),'0.0#') AS AVG\_RATING\_X\_CITY,

HI.CITY

FROM

AIRBNB\_BOOKING\_DATA ABD

JOIN

HOST\_INFO HI

ON HI.HOST\_LOCATION\_ID = ABD.HOST\_LOCATION\_ID

WHERE

HI.COUNTRY LIKE '%UNITED STATES%'

GROUP BY

HI.CITY

ORDER BY

AVG\_RATING\_X\_CITY DESC

;

/\*Question 5: What is the percentage of guests per category (adults, minors and children) in each Airbnb

reservation (AIR\_CONFIRMATION\_ID)? What are the host names and arrival dates linked to every reservation?\*/

SELECT

HI.HOST\_NAME,

ARD.AIR\_CONFIRMATION\_ID,

ARD.START\_DATE,

ARD.END\_DATE,

FORMAT(ROUND(SUM(ARD.GUEST\_ADULT\_NO) \* 100.0 / SUM(ABD.TOTAL\_GUESTS),3),'0.0#') AS GUEST\_ADULT\_PERCENT,

FORMAT(ROUND(SUM(ARD.GUEST\_CHILDREN\_NO) \* 100.0 / SUM(ABD.TOTAL\_GUESTS),3),'0.0#') AS GUEST\_CHILDREN\_PERCENT,

FORMAT(ROUND(SUM(ARD.GUEST\_INFANT\_NO) \*100.0 / SUM(ABD.TOTAL\_GUESTS),3),'0.0#') AS GUEST\_INFANT\_PERCENT

FROM

AIRBNB\_RESERVATION\_DETAILS ARD

JOIN

AIRBNB\_BOOKING\_DATA ABD

ON ABD.AIR\_CONFIRMATION\_ID = ARD.AIR\_CONFIRMATION\_ID

JOIN

HOST\_INFO HI

ON HI.HOST\_ID = ABD.HOST\_ID

WHERE

ARD.START\_DATE > '12/31/2018' AND ARD.START\_DATE < '1/1/2020'

GROUP BY

ARD.AIR\_CONFIRMATION\_ID, HI.HOST\_NAME, ARD.START\_DATE, ARD.END\_DATE

ORDER BY

HI.HOST\_NAME ASC

;

/\*Question 6: What is the sum of every flight passenger per flight confirmation id? \*/

SELECT

EPT.FLIGHT\_CONFIRMATION\_ID,

COUNT(EPT.FLIGHT\_CONFIRMATION\_ID) AS PASSENGER\_COUNT

FROM

EXPEDIA\_PASSENGER\_TICKETS EPT

GROUP BY EPT.FLIGHT\_CONFIRMATION\_ID

UNION ALL

SELECT

'SUM' FLIGHT\_CONFIRMATION\_ID,

COUNT(FLIGHT\_CONFIRMATION\_ID)

FROM

EXPEDIA\_PASSENGER\_TICKETS

;

/\*Question 7: What are the longest round-trips and nonstop flights that have been booked?\*/

SELECT

FLIGHT\_CONFIRMATION\_ID,

DEPT\_FIRST\_FLIGHT\_NO,

DEPT\_TRIP\_DURATION\_HR,

RTRN\_FIRST\_FLIGHT\_NO,

RTRN\_TRIP\_DURATION\_HR,

FORMAT(SUM(DEPT\_TRIP\_DURATION\_HR) + SUM(RTRN\_TRIP\_DURATION\_HR),'0.0#') AS TOTAL\_TRIP\_DURATION

FROM

EXPEDIA\_TRIP\_DETAILS

WHERE

RTRN\_FLIGHT\_TYPE != 'NA' AND RTRN\_FLIGHT\_TYPE != 'LAYOVER'

GROUP BY

FLIGHT\_CONFIRMATION\_ID,

DEPT\_FIRST\_FLIGHT\_NO,

RTRN\_FIRST\_FLIGHT\_NO,

DEPT\_TRIP\_DURATION\_HR,

RTRN\_TRIP\_DURATION\_HR

HAVING

COUNT(DEPT\_FIRST\_FLIGHT\_NO) = 1 AND COUNT(DEPT\_SECOND\_FLIGHT\_NO) = 0 AND COUNT(DEPT\_THIRD\_FLIGHT\_NO) = 0

ORDER BY RTRN\_TRIP\_DURATION\_HR DESC

;

--END