-- 1. List the reservations made for after February 15, 2022.

SELECT \*

FROM RESERVATION

WHERE BOOKING\_DATE >= '15-Feb-2022'

-- 2. Find the total number of no-shows, that is, customers who made reservations, but no rental contracts were created by the end of the time period mentioned in Phase 1.

SELECT CX.FULL\_NAME, C.CONTRACT\_ID, R.\*

FROM RESERVATION R

LEFT JOIN CONTRACT C ON R.RESERVATion\_ID = C.RESERVATION\_ID

LEFT JOIN CUSTOMER CX ON R.CUSTOMER\_ID = CX.CUSTOMER\_ID

WHERE C.RESERVATION\_ID IS NULL

-- 3. List the names and cell phone numbers of all customers who made reservations for SUVs.

SELECT C.FULL\_NAME, C.PHONE\_NUMBER, R.\*

FROM RESERVATION R

LEFT JOIN CUSTOMER C ON R.CUSTOMER\_ID = C.CUSTOMER\_ID

WHERE R.BOOKED\_CAR\_TYPE = 'SUV'

-- 4. List the names of the customers and the total amount of each rental for all rentals of a compact car since January 1st, 2022

SELECT CX.CUSTOMER\_ID, CX.FULL\_NAME, C.TYPE\_OF\_CAR\_RENT, SUM(C.TOTAL\_PURCHASE\_AMOUNT) AS TOTAL\_AMOUNT

FROM CONTRACT C

LEFT JOIN RESERVATION R ON C.RESERVATION\_ID = R.RESERVATION\_ID

LEFT JOIN CUSTOMER CX ON R.CUSTOMER\_ID = CX.CUSTOMER\_ID

WHERE C.TYPE\_OF\_CAR\_RENT = 'Compact' AND R.BOOKING\_DATE >= '01-JAN-2022'

GROUP BY CX.CUSTOMER\_ID, CX.FULL\_NAME, C.TYPE\_OF\_CAR\_RENT

-- 5. Provide the total number of cars by category (compact, mid-sized, etc.) held by Ames Rental Car.

SELECT TYPE\_OF\_CAR, COUNT(INVENTORY\_ID) AS COUNT\_OF\_CAR

FROM CAR\_INVENTORY

GROUP BY TYPE\_OF\_CAR

-- 6. Provide the number of rental cars (total) that are available to rent, as of March 3rd, 2022.

SELECT COUNT(INVENTORY\_ID) AS Count\_of\_Available\_Cars

FROM CAR\_INVENTORY

WHERE DATE\_OUT < = '03-Mar-2022'

-- 7. Provide the total revenue earned in rentals for the company from the period of February 1st, 2022-February 28th, 2022.

SELECT SUM(FINAL\_PAYMENT) AS FEBRUARY\_REVENUE

FROM RECEIPT

WHERE PAYMENT\_DATE\_TIME BETWEEN '01-FEB-2022' AND '28-FEB-2022'

-- 8. Which customer brought in the highest amount of revenue between January 1st, 2022 and April 30th, 2022?

SELECT CX.CUSTOMER\_ID, CX.FULL\_NAME, SUM(C.TOTAL\_PURCHASE\_AMOUNT) AS TOTAL\_AMOUNT

FROM CONTRACT C

LEFT JOIN RESERVATION R ON R.RESERVATION\_ID = C.RESERVATION\_ID

LEFT JOIN CUSTOMER CX ON R.CUSTOMER\_ID = CX.CUSTOMER\_ID

WHERE R.BOOKING\_DATE BETWEEN '01-JAN-2022' AND '30-APR-2022'

GROUP BY CX.CUSTOMER\_ID, CX.FULL\_NAME

HAVING SUM(C.TOTAL\_PURCHASE\_AMOUNT) =

(SELECT MAX(Total\_Amount) AS TOTAL\_AMOUNT

FROM

(SELECT CX.CUSTOMER\_ID, CX.FULL\_NAME, SUM(C.TOTAL\_PURCHASE\_AMOUNT) AS TOTAL\_AMOUNT

FROM CONTRACT C

LEFT JOIN RESERVATION R ON R.RESERVATION\_ID = C.RESERVATION\_ID

LEFT JOIN CUSTOMER CX ON R.CUSTOMER\_ID = CX.CUSTOMER\_ID

WHERE R.BOOKING\_DATE BETWEEN '01-JAN-2022' AND '30-APR-2022'

GROUP BY CX.CUSTOMER\_ID, CX.FULL\_NAME))

-- 9. Which employee has been with the company the longest?

SELECT EMPLOYEE\_ID, FULL\_NAME, HIRE\_DATE

FROM EMPLOYEE

WHERE HIRE\_DATE =

(SELECT MIN(HIRE\_DATE) AS HIRE\_DATE

FROM EMPLOYEE)

-- 10. Which customer has rented the most cars from the company as measured in number of days?

SELECT CX.CUSTOMER\_ID, CX.FULL\_NAME, CAST(C.DATE\_AND\_TIME\_IN AS DATE) - CAST(C.DATE\_AND\_TIME\_OUT AS DATE) AS Diff

FROM CONTRACT C

LEFT JOIN RESERVATION R ON R.RESERVATION\_ID = C.RESERVATION\_ID

LEFT JOIN CUSTOMER CX ON CX.CUSTOMER\_ID = R.CUSTOMER\_ID

WHERE CAST(C.DATE\_AND\_TIME\_IN AS DATE) - CAST(C.DATE\_AND\_TIME\_OUT AS DATE) =

(SELECT MAX(Diff)

FROM

(SELECT CX.CUSTOMER\_ID, CX.FULL\_NAME, SUM(CAST(C.DATE\_AND\_TIME\_IN AS DATE) - CAST(C.DATE\_AND\_TIME\_OUT AS DATE)) AS Diff

FROM CONTRACT C

LEFT JOIN RESERVATION R ON R.RESERVATION\_ID = C.RESERVATION\_ID

LEFT JOIN CUSTOMER CX ON CX.CUSTOMER\_ID = R.CUSTOMER\_ID

GROUP BY CX.CUSTOMER\_ID, CX.FULL\_NAME))