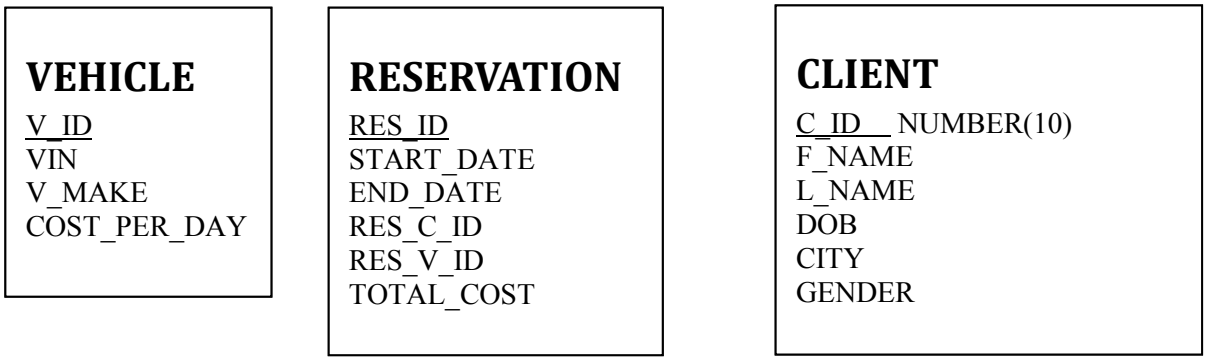
Small database:
This is a relatively simplified database to store data on clients, cars, and rentals. The RESERVATION table includes the data on past rentals and future reservations. The cars can be rented only once a day. The START_DATE and END_DATE include time, but rentals are calculated in full days. This means that a car rented on 2016-10-10 23:30:00 and returned on 2016-10-11 01:00:00 has been rented for two day.

This is not the best design ☺ but it gives us a chance to exercise some SQL.



The following are the CREATE statements

```
/*==============================================================*/
 /* Table: VEHICLE                                               */
/*==============================================================*/
CREATE TABLE VEHICLE (
V_ID NUMBER(10) NOT NULL,
VIN  CHAR(17)  NOT NULL,   -- 17 characters for cars after 1981
V_MAKE VARCHAR2(25) not null,
COST_PER_DAY NUMBER(6,2) not null,
 constraint PK_VEHICLE primary key (V_ID) );

/*==============================================================*/
/* Table: RESERVATION                                           */
/*==============================================================*/
create table RESERVATION (
RES_ID NUMBER(10) not null,
START_DATE DATE not null,
END_DATE DATE not null,
RES_C_ID NUMBER(10) not null REFERENCES CLIENT(C_ID),
RES_V_ID NUMBER(10) not null REFERENCES VEHICLE(V_ID),
TOTAL_COST NUMBER(8,2),
constraint PK_RESERVATION primary key (RES_ID) );
/*==============================================================*/
```

1. Write an SQL statement to create table CLIENT. Gender could be NULL.

2. List all reservations for current month (use SYSDATE for the month).
3. List the vehicle (VIN) and total number of reservations.
4. List the car make and total number of reservations last year.
5. List the clients and the total number of reservations (include the clients without the reservations).
6. Calculate the total revenue for FORD.
7. Find the average cost per day for each make. List make and the average cost.
8. Find the VIN of the most rented car (the largest number of the rented days).
9. Find the cars (V_IDs) which were never rented.
10. List the customers outside of Kamloops. List each city and the customer names. Format for the name: a last name (mixed case), a comma, a space, and a first name (mixed case).
11. List the customer ids for the customers who are older than 65 (this year).
12. List the customers who have rented at least twice in last year (use the START_DATE as an indication of the rental year).
13. Calculate how many rentals start on Monday.
14. What is an average rental length (in days) for HONDA.
15. Calculate the percentage of female customers.
16. Find the cars rented last year but not rented this year.
17. List the clients who have rented only NISSANs (no other cars).
18. Increase the cost per day by 5% for all NISSAN cars.
19. Decrease the cost per day by 5% for all cars which have been not rented this year.
20. Add a COMMENTS column to the CLIENT table (the longest comment will have 400 characters).
21. Add an e-mail address column to the CLIENT table.
22. Add yourself as a client and add a comment “it’s a repeating client” (use the same spelling).
23. Add a new car and add one rental transaction for yourself (calculate the cost of the rental).
24. Remove from the database all cars which have never been rented.
25. Create a view YOUNG_CLIENT which will be used for e-mailing special offers. This view should have the Client Id, the names, and e-mail addresses of the clients who are between 21-30 years old.