**Assignment 1**

The purpose of this database is to model data for a breakdown company. Members must be registered with the company and each member can have multiple vehicles.

**Task 1:**

Create the following tables:

Member

* MemberID(PK), varchar(10)
* MemberFName, varchar(20)
* MemberLName, varchar(20)
* MemberLoc, varchar(20)

Vehicle:

* VehicleReg(PK), varchar(10)
* VehicleMake varchar(10)
* VehicleModel, varchar(10)
* MemberID(FK), varchar(10)

Engineer:

* EngineerID(PK), int
* EngineerFName, varchar(20)
* EngineerLName, varchar(20)

Breakdown:

* BreakdownID(PK), int 10
* VehicleReg(FK), varchar(10)
* EngineerID(FK), int
* BreakdownDATE, date
* BreakdownTIME, time
* BreakdownLoc

Using the Alter command set the foreign keys

**Task 2**

Enter the following data

* Member table – 5 records
* Vehicle table – 8 records
* Engineer table – 3 records
* Breakdown table – 12 records
  + Have 2 breakdowns on the same day
  + Have 3 breakdowns in the same month
  + Have at least 3 vehicles that have broken down more than once

**Task 3**

Perform the following queries

1. The names of members who live in a location e.g. For example, London.
2. All cars registered with the company e.g. all Nissan cars.
3. The number of engineers that work for the company.
4. The number of members registered.
5. All the breakdown after a particular date
6. All the breakdown between 2 dates
7. The number of times a particular vehicle has broken down
8. The number of vehicles broken down more than once

**Task 4**

Perform the following queries:

1. All the vehicles a member owns. For example, Matt
2. The number of vehicles each member has – sort the data based on the number of cars from highest to lowest.
3. All vehicles that have broken down in a particular location along with member details.
4. A list of all breakdowns along with member and engineer details between two dates.
5. A further 3 relational queries of your choice that are meaningful to the company.

**Task 5**

Using W3Schools or any other resource research the following functions – Avg, Max, Min, Sum. Explain with examples how each one is used.

**Task 6**

1. If a member has more than one vehicle, then display multi-car policy
2. Create a stored procedure which will display number of cars for any member whose first name and last name you are passing as argument with calling the stored procedure!