



Assumption:

1. A customer can insure multiple cars but a car cannot be insured by many customers
2. A customer can own multiple policies and a policy can be owned by one customer
3. A customer must file multiple claims for multiple cars that are damaged
4. For claim, only Customer ssn and Car vin may not be enough to refer so two attributes 'date that claim was made' and 'amount of damage' are helper attributes to refer specific claim
5. A Policy can cover multiple cars but a car can be covered under single policy
6. Assume every customer must insure car and own a policy and then vice versa.

## Part 2 Relation Schema

Entities:

1. Car ( VIN, Make, Model, year, color)
2. Customer ( SSN, name(first, last, middle initial) )
3. Policy ( Policy ID, Start Date, Expiration Date, Deductible )
4. Claim ( date that claim was made, amount of damage )

Relationships:

1. Insure < Customer, Car > 1:N, TOTAL/TOTAL
2. Cover < Policy, Car > 1:N, PARTIAL/TOTAL
3. Owns < Customer, Policy > 1:N, TOTAL/TOTAL
4. File < Customer, Car, Claim > 1:1:N, PARTIAL/PARTIAL/TOTAL

## Resulting Schemas:

CAR (VIN, Make, Model, year, color, ssn, Policy ID)

FK (ssn) → CUSTOMER (ssn)

FK (Policy ID) → POLICY (Policy ID)

CUSTOMER ( SSN, name(first, last, middle initial) )

POLICY (Policy ID, Start Date, Expiration Date, Deductible, ssn )

FK (ssn) → CUSTOMER (ssn)

CLAIM (date that claim was made, amount of damage, ssn, VIN)

FK (ssn) → CUSTOMER (ssn)

FK (VIN) → CAR (VIN)

-----Same relation schema answer in different word file-----