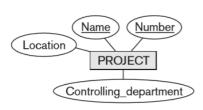
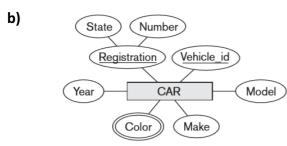
## Question 1 - Map the below ER fragments, if required, list any foreign keys.

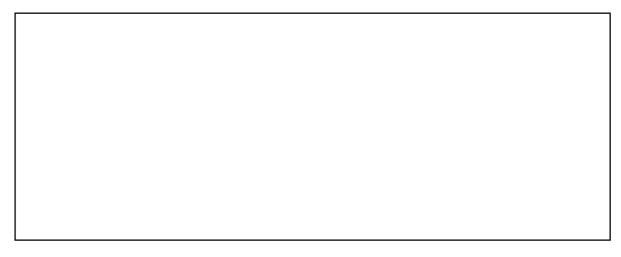
(Elmasri & Navathe: Chapter 3: 3.8)

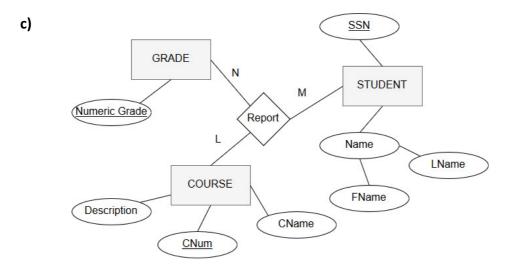
a)

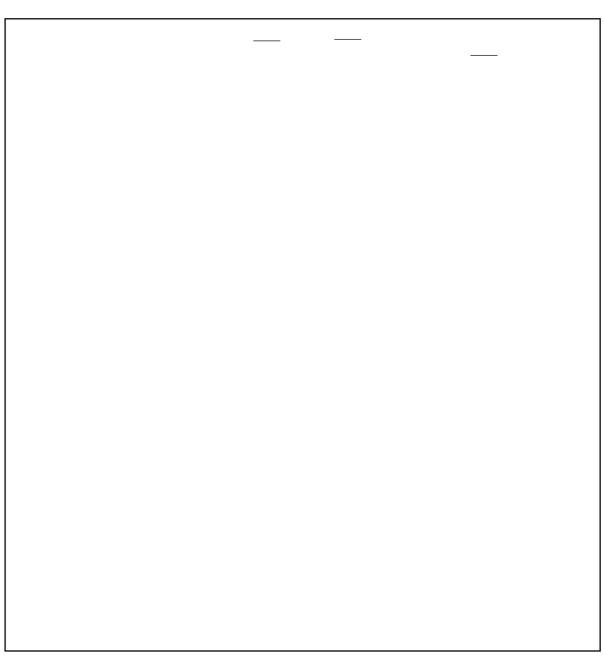


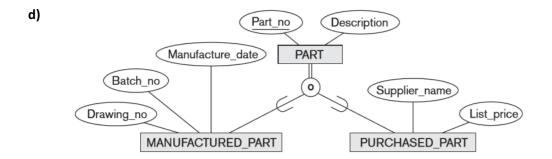


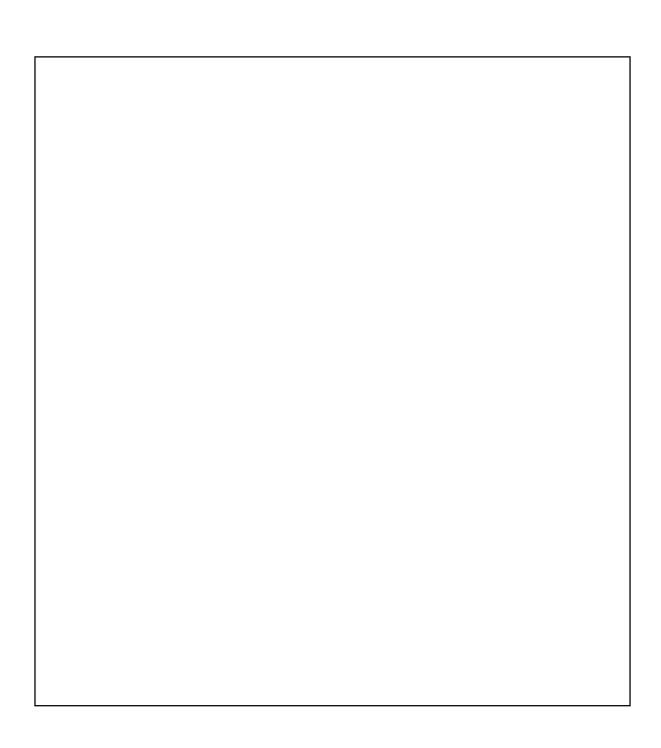






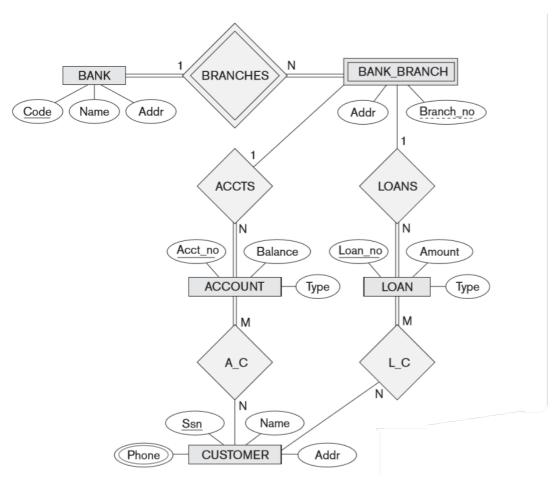


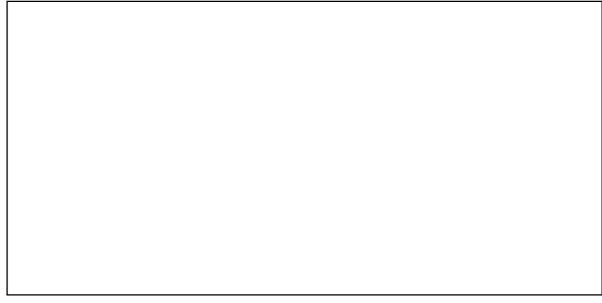




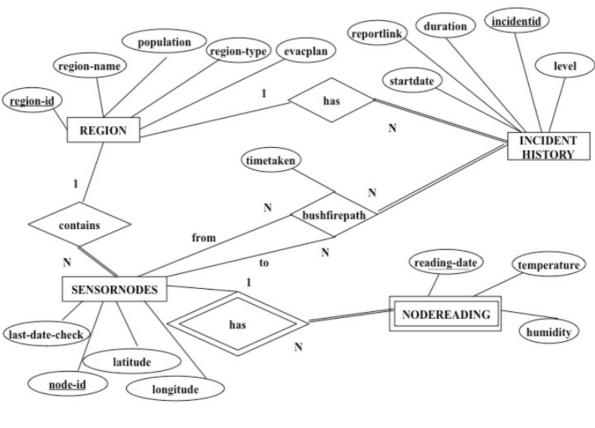
## Question 2 - Map the following ER diagrams. Show all mapping steps and include foreign keys.

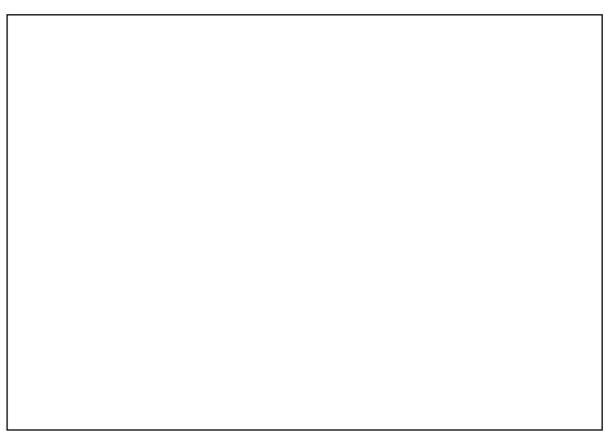
(Elmasri & Navathe: Chapter 7: 7.21)





Question 3 - Map the following ER diagrams. Show all mapping steps and include foreign keys.





Question 4 – Reverse Engineer the following Schema (Construct an ER Diagram from the Schema)	)
REEF (reef-name, 2006-bleached-area, summer-maximal-temp, latitude, longitude)	
CORALSAMPLING (sample-no, reef-name, coral-code, date-of-sampling, bleach-percent)	
CORAL (coral-code, coral-name, thermal-threshold)	
REEF-TEMP (reef-name, date-of-reading, temp-reading)	
CORALSAMPLING.coral-code references CORAL.coral-code	
CORALSAMPLING.reef-name references REEF.reef-name	
REEF-TEMP.reef-name references REEF.reef-temp	

Question 5 – Reverse Engineer the following Schema (Construct an ER Diagram from the Schema) $$
PATIENT (Pid)
CLINIC (Rno)
DOCTOR (Lic-no)
GP ( <u>Lic-no</u> , Hours)
SPECIALIST (Lic-no, Specialisation)
WORKS_IN (Doctor-Lic, Clinic-No)
APPOINTMENT (Doctor-Lic, Patient-Id, Date/Time, Fee)
GP.Lic-no references DOCTOR.Lic-no
SPECIALIST.Lic-no references DOCTOR.Lic-no
WORKS_IN.Doctor-Lic references DOCTOR.Lic-no
WORKS_IN.Clinic-No references CLINIC.Rno
APPOINTMENT.Doctor-Lic references DOCTOR.Lic-no
APPOINTMENT.Patient-Id references PATIENT.Pid