Name:

Student

SID: int	major: int	email : text	name : text

Question

SID: int	QID : int	Answer : text	Grade : int

Exam

EID: int	QID : int

Grade

SID: int	Eid : int	Grade : int

{ s.name q.grade $|Student(s) \wedge Question(q) \wedge Exam(e) \wedge e.id = 2 \wedge e.qid = q.qid \wedge q.sid = s.sid \wedge ((\forall r)(not(Question(r)) \vee q.qid \neq r.qid \vee q.grade \geq r.grade \vee ((\forall t)not(Student(t)) \vee t.major \neq s.major)))$ }

What does the above query do?

Write the same query in SQL.

Assume that there are four questions on test 2. Could the division operator be used to identify students who correctly answered questions 1, 2, and 4 on test 2? If so, demonstrate, else describe why not?

What can you infer about the structure of the ER model based upon the tables? Describe the rules that are applicable. Sketch the ER diagram.

From your derived ER model add a superclass to student, voter, and another entity worker that is a subclass of voter. Describe what changes would need to be made to the tables.

Explain which is more important referential integrity constraints or entity integrity constraints.