Consider two objects x and y that are equal, but not identical and they each have a collection associated with them, and these collections are equal. Can the collections be identical if:
a.) The collections are associated with the objects via ownership semantics.
b.) The collections are associated with the objects via reference semantics.
c.) Explain briefly.

Write a query that returns the courses in which all students are CS majors. Describe any non-obvious tables.
a) Using an universal quantifier
b) Using an existential quantifier

Describe a situation where you would not want to use an inverse relation in the object data model, and why.

Based on the ER model drawn on the board, describe the object student using the object definition language.

Write a query using the object you just described, and the ER model on the board to return the names of the classes the student has on Fridays.

Write a tuple calculus query to find a student's last class before the weekend. You may assume that the days may be compared using $<$ operators. Describe any non-obvious tables used.