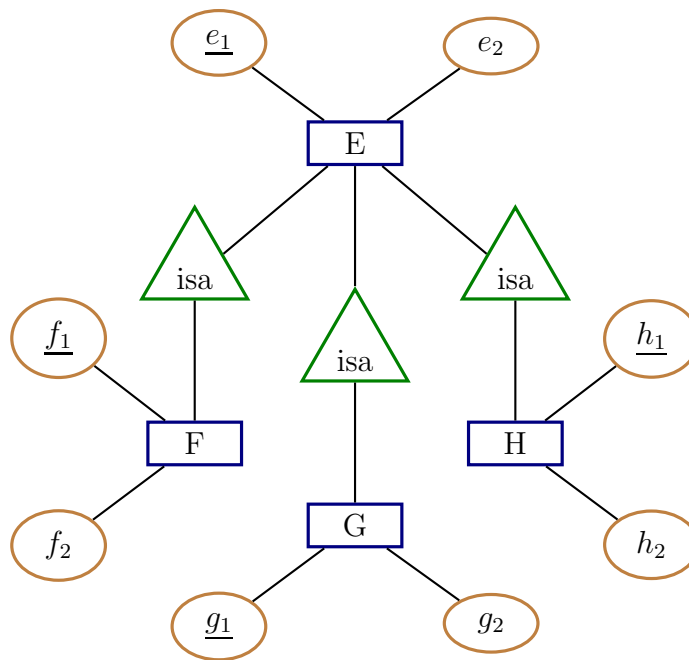1. List the members of your group below. Underline your name.

2. Map the following ER diagram to a relational schema using each of the three methods for mapping subclass structures to relations: (1) ER style, (2) object-oriented style, and (3) using nulls.

3. Are there Datalog queries that are safe (their result is always finite) but that do not satisfy the textbook's safety condition? Justify your answer.

4. Are there Datalog (with negation) queries that are well defined but not stratified? Explain.

5. Given the relation `Flights(airline, num, src, dst)` with the obvious semantics, write Datalog queries for destinations reachable from Bangor...

   (a) in exactly two hops.
   (b) with unlimited hops.
   (c) using only Delta flights.
   (d) using alternating Delta and US-Airways flights (no consecutive Delta or US flights).
   (e) using Delta but not reachable using any other single airline.
   (f) using Delta but not reachable using any other airlines (possibly in combination).
   (g) in at most two hops using Delta and in no fewer than three hops using some other airline.

[additional space for answering the earlier question]

[additional space for answering the earlier question]