SEIS 630
Project Queries
Write **ONE SQL** statement to answer each of the following questions. You can use any of the tables or views you have already created.

Your handout must print the contents of each table (using select * tab_name) first. Then for each question, your print out must include, **question in English**, **your SQL query text, and the answer in the order specified below**. Pay attention to understandability and performance of your answers. Ambiguous answers will not be given full credit. Check Blackboard for "Criteria for grading queries". Please deliver your DDL and view definitions as well. **An electronic version of all your SQL statements must be emailed to me by the due date.**

Queries:

1. For relationships that connect more than two entities, print the relationship name and the entities they relate. **Your statement must count the number of entities that are connected to a relationship as opposed to using the value of the type attribute.**
2. Print the name of all relationships of degree three and the three entities they relate. In this case, extra credit will be given if the name of the relationship and the three entity names are printed on one line. Answers that use three lines are accepted.
3. Print the name of all binary relationships that have a cardinality of M-to-M and have max cardinality of M.
4. For entities that have two or three attributes, print the name of the entity and its attributes.
5. Print the name of all entities that participate in 2, 3, or 5 relationships.
6. Print the name of all entities that have at least one attributes with the data type "Date"
7. For all attributes that use a domain, print the name the attribute, the name of the domain, and the data type of the domain (one line per attribute).
8. Print the name of any attribute, entity, relationship, or specialization that has either lowercase "r" or uppercase "R" somewhere in their name. For example, if an entity has the name "Project", your query will print a line as "Project Entity", and if a relationship has the name Refers", your query also prints a line as "Refers Relationship".
9. Print the name of entities that participate in at least 2 relationships with cardinality of 1 or 2 relationships with cardinality M on the end that connects to the entity.
10. Print the name of each entity that has a Pkey with the name(s) of the attribute(s) that form the Pkey
11. Print the names of all derived and base attributes and the data type of the each. For example, if Age is derived from DOB and the data type of Age is Number(2) and the data type of DOB is Date, you need to print: **Age Number(2) DOB Date**
12. Print the name of all composite attributes and their component attributes for those composite attributes that have one component attributes is defined on a domain.
13. Print the name of each specialization, its type (Overlapping or Disjoint), and its super type and sub-type entity names. For example, if we have an overlapping specialization S1 with E1 as the super type, E2 and E3 as the subtypes, then you will print:

E1 S1 Overlapping E2
E1 S1 Overlapping E3

1. Print the name of all specialization, their **super type** entity, and the super type entity attribute names (one line per entity and attribute combination). For example, if we have specialization S1 with E1that has attributes A1 and A2 as the super type, then you will print:

   S1 E1 A1
   S1 E1 A2

1. Print the name of all specialization, their **subtype** entity, and the subtype entity attribute names (one line per entity and attribute combination). For example, if we have specialization S1 with E2 as one subtype with attributes A3 and A4 and E3 as the other subtype with attribute A5, then you will print:

   S1 E2 A3
   S1 E2 A4
   S1 E3 A5