**ER Diagram 4**

4) For each consistency error in Figure 1, you should identify the consistency rule violated and suggest possible resolutions of the error. The ERD has generic names to help will concentrate on finding diagram errors rather than focusing on the meaning of the diagram



A) The following list identifies possible ways to fix consistency errors :

* Attribute name rule resolution: rename one of the Attribute2-1 attributes. Probably renaming the second attribute is easier because it is not the PK.
* Identifying relationship rule resolution: The problem can be resolved by changing Entity4 to a weak entity or changing the relationship (Rel6) to regular (non-identifying).
* Identification dependency cardinality rule resolution: The problem can be resolved by changing the weak entity type’s cardinality in Rel7 (near Entity7) to (1,1). Alternately, Rel7 can be made non-identifying and Entity6 can be changed to strong (non-weak).
* Redundant foreign key rule resolution: Normally the problem can be resolved by removing the redundant foreign keys (Entity2.Attribute1-1 and Entity2.Attribute4-1). If the attributes do not represent foreign keys, they should be renamed instead of removed.

