

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

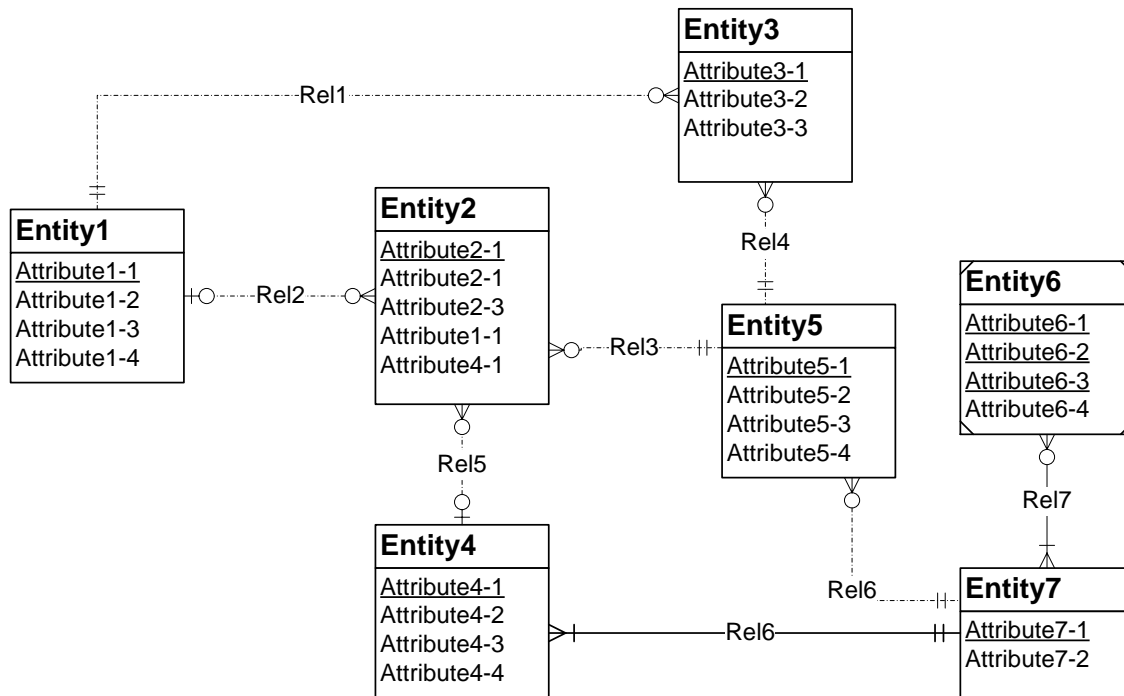


Figure 1: ERD for Problem 4

1. Entity 6 with PK rule violation. Weak entity does not have any primary key.
2. Entity 2 with redundant FK violation. The problem can be resolved by removing Attribute1-1 and Attribute4-1, both primary key in other entities.
3. Rel6 should not be identifying relationship, as both entity4 and entity7 are regular entities.
4. Resolution of identification dependency cardinality rule. The problem can be resolved by changing the weak entity's cardinality in Rel7 to (1,1)