Ilyas Karimov Normalization and Denormalization I

Task 1. Roberts’s Rule One and Roberts’s Rule Two are equivalent if and only if they define the same set of databases. That is, if every database that satisfies Rule One also satisfies Rule Two. Are they equivalent? Prove your answer.

I would say that they are correlated but definitely not the same. What I mean by correlated is that, for example, we have a table, say Employee table, and if this table belongs to only one entity, that is, if the attributes of the Department are not in this table then it will help to avoid repeating the same facts. In this case, we can say that to comply with Roberts's Rule 1 means to comply with Rule 2.

Now suppose, there is a small company with 10 departments and one person from each department, ie a total of 10 people work and each person is from a different department. Now suppose an Employee table whose attributes are EMP #, ENAME, JOB, DEPTNO, DEPTNAME. This 10-row table doesn't actually repeat any facts, but that doesn't mean it fits Rule 1, actually, this table model **violates** Roberts's Rule 1. Which proves that those rules are not the same rules.

Task 2.

Steps I followed:

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Then I open SQL PLUS and wrote the commands in the assignment description.

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