

We bring the subjects relational model and normalization together to illustrate the transformation of user's requirements expressed in entity-relationship models into relational database design. These designs are independent of any particular DBMS. There are two main sections. In the first, we show how to transform e-r data models into relational design. Normalization is important to this process because entities can contain more than one semantic theme. After demonstrating how to represent entities, we examine the representation of relationships using the relational model. The second section applies the concepts based n the first section, illustrating the transformation of e-r models into the representation of four common data structures. These structures are special cases of E-R constructs, and the techniques shown in the first section are applied to represent them with relations. We give these structures special attention because they occur so frequently as common patterns of entities and relationships.