Chapter6:  
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1 An atomic attribute can’t be subdivided to produce meaningful components (last name).  
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2 The most likely data type for a surrogate key is numeric.  
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3 From a strictly database point of view, derived attribute values can be calculated when they  
are needed to write reports or invoices.  
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4 For most business transactional databases, we should normalize relations into 3nf.  
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5 BCNF can be violated only if the table contains more than one candidate key.  
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6 When designing a database, you should construct a data model.  
(Hint: It involves normalization, and what should be done prior to creating tables.)  
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7 Normalization represents a micro view of the entities within the ERD.  
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8 The conflicts between design efficiency, information requirements, and processing speed  
are often resolved through denormalization.  
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9 data warehouse databases reflect the ever-growing demand for greater scope and depth in the data  
on which decision support systems increasingly rely.  
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Chapter5:  
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1 The most important characteristic of an entity is its primary key, used to uniquely identify  
each entity instance.  
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2 In A natural key is a real-world, generally accepted identifier used to uniquely identify real-  
world objects.  
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3 If one exists, a data modeler uses a natural key as the primary key of the entity being modeled.  
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4 The primary key's main function is to uniquely identify a(n) entity instance/row within a table.  
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5 The “unique values” characteristic of a primary key states that: The PK must uniquely identify  
each entity instance. A primary key must be able to guarantee unique values. It cannot  
contain nulls.  
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6 The “security compliant” characteristic of a primary key states that: The selected primary key must  
not be composed of any attribute(s) that might be considered a security risk or violation.  
For example, using a Social Security number as a PK in an EMPLOYEE table is not a good  
idea.  
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7 Surrogate primary keys are especially helpful when there is no primary key.  
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8 foreign keys work with primary keys to properly implement relationships in the relational  
model.  
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9 The preferred placement for a foreign key when working with a 1:1 relationship is to  
place foreign key in 1 of the entities  
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10 time variant data refer to data whose values change over time and for which you must keep a  
history of the data changes.  
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