Homework 2

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CMIS 320
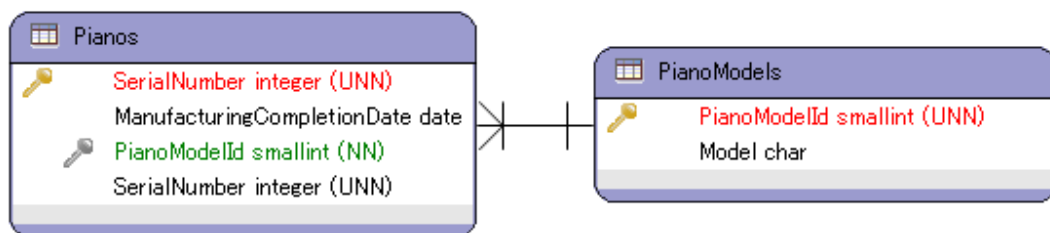
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Question

a. A piano manufacturer wants to track all pianos it makes. Each piano has a unique serial number and a manufacturing completion date. Each instrument represents exactly one piano model, all of which have an identification number and model. The company produces thousands of pianos of a certain model, and the design is specified before any single piano exists.

b. A vendor builds multiple types of tablet computers. Each has a type identification number and a name. The key specifications for each type include amount of storage and display type. The company uses multiple processor types, exactly one of which is used for a specific tablet type. The same processor can be used in multiple types of tablets. Each processor has a manufacturer and a manufacturer's unique code that identifies it.

1. Identify the degree and cardinalities of the relationship.

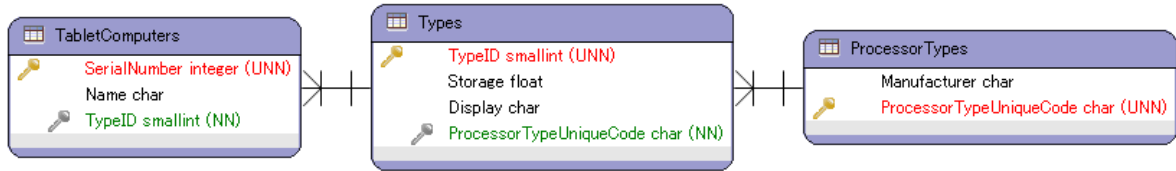2. Express the relationships graphically with an E-R diagram.

Entity-Relationship Diagram for Pianos

The degree of the relationship is a binary relationship. The cardinality of the relationship is a one-to-many relationship.

Entity-Relationship Diagram for Tablet Computers

The degree of the relationship is a ternary relationship. The cardinalities of the

relationship among TabletComputers, Types, and ProcessorTypes are one-to-many relationships