1. Extend the ERD from problem 3 with the *Product* entity type and an M-N relationship between *Product* and *Order*. Choose an appropriate relationship name using your common knowledge of connections between products and orders. Define minimum cardinalities so that an order is optional to a product, and a product is mandatory to an order. For the *Product* entity type, add attributes *ProdNo* (primary key), *ProdName*, *ProdQOH*, *ProdPrice*, and *ProdNextShipDate*. For the M-N relationship, add an attribute for the order quantity. If you are using a data modeling tool that supports data type specification, choose appropriate data types for the attributes based on your common knowledge.

**Solution:**



For data types, ProdNo should be INTEGER, ProdName should be VARCHAR, ProdQOH should be INTEGER, ProdPrice should be fixed decimal (DECIMAL) with two digits to the right of the decimal point, and ProdNextShipDate should be DATE or DATETIME.