Pengenalan Basis Data

ER Modelling

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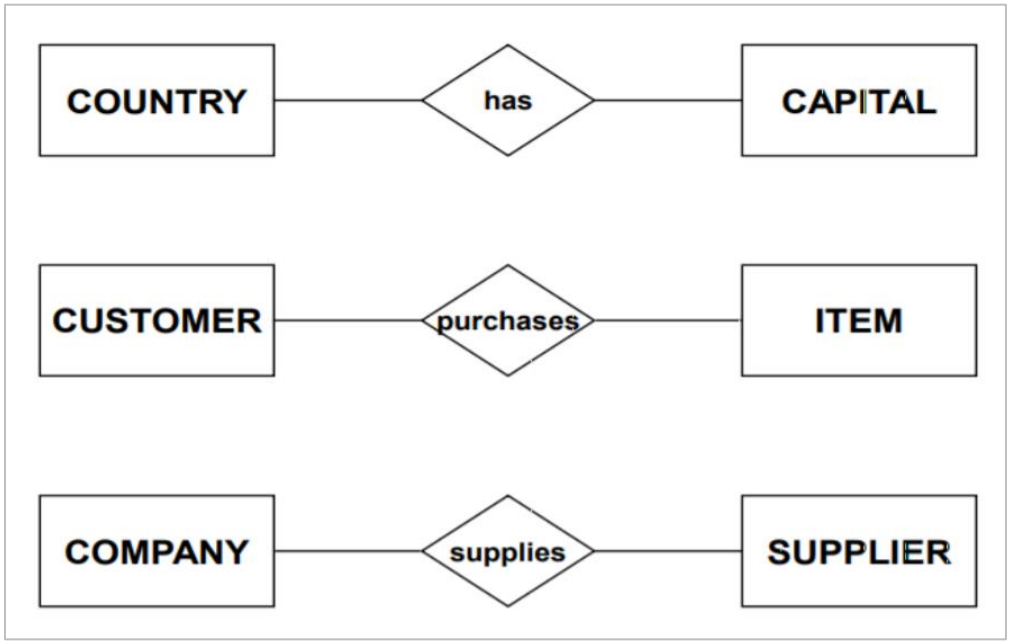
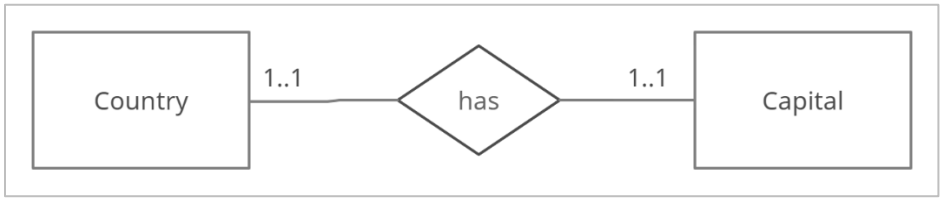
Task 1

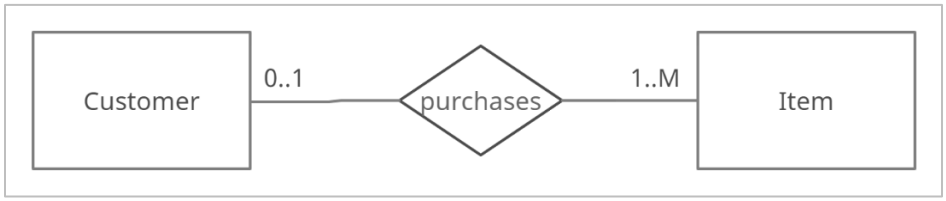
Complete the relationship



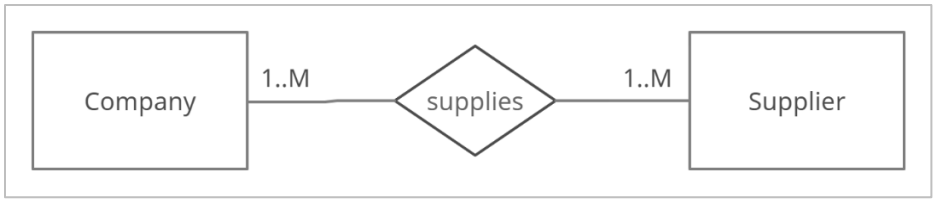
1. The answer for the first ER Model is the following



2. The answer for the second ER Model is the following

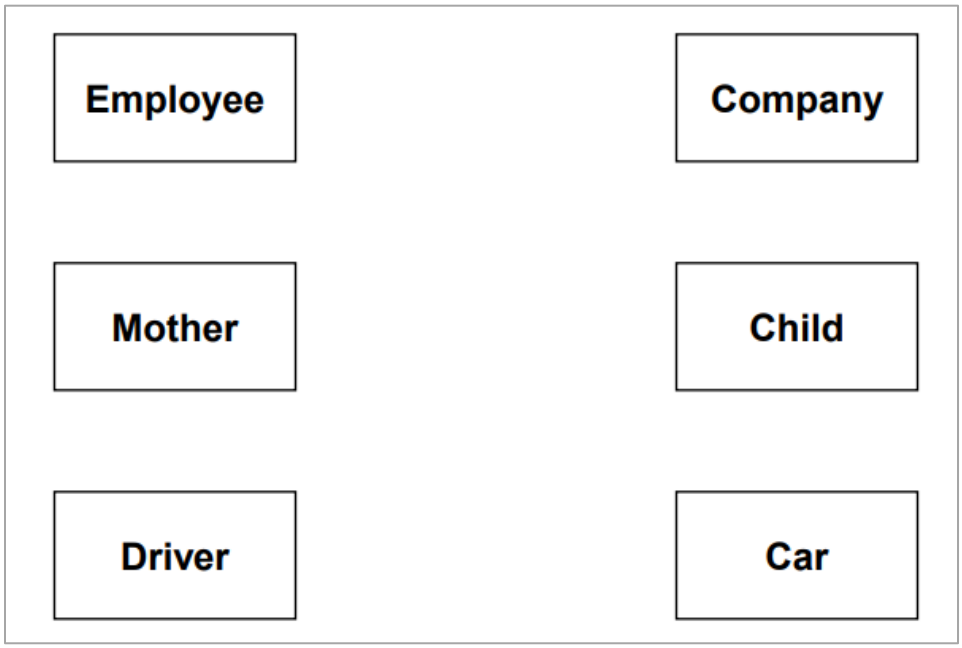


3. The answer for the third ER Model is the following

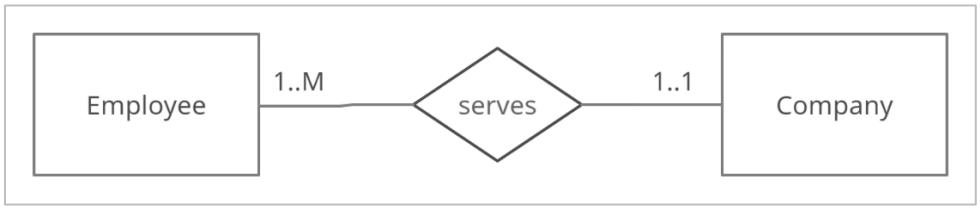


Task 2

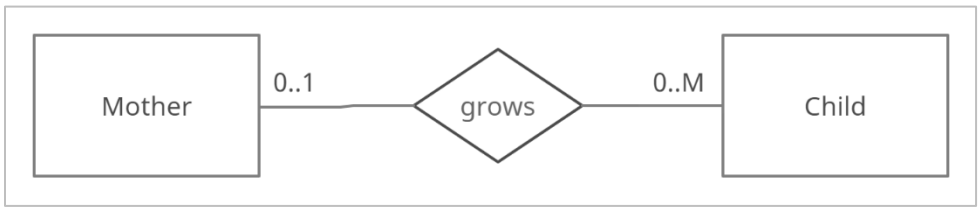
Complete the relationship



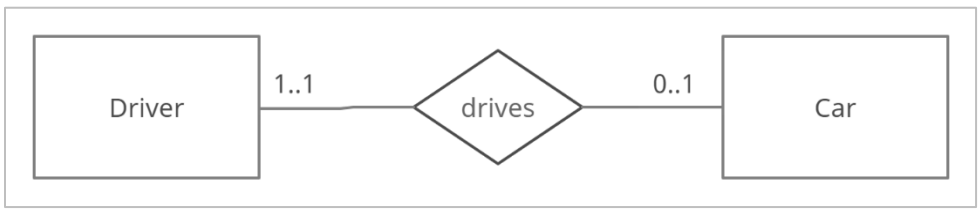
1. The following is the answer for the first relationship



2. The following is the answer for the second relationship



3. The following is the answer for the third relationship

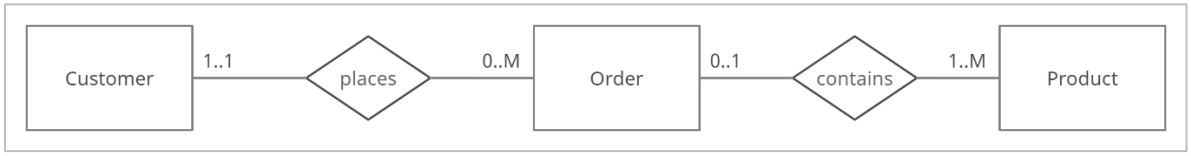


Task 3

Create an ER Model of the following description

A customer can place an order for one or more products. Customers that have not placed any orders can be included in the customer database for purposes of marketing research. Products that have not been ordered can be part of the product database. An order has to be associated with at least one product but can be associated with many products.

The ER model that can be formed by the explanation above is as following.



A bit of explanation that can be given according to the ER model above is as following.

A customer can place zero orders or many orders. And an order can only be placed or owned by only one customer. An order contains at least one product or up to many products. One exact product (in context of quantity not by the kind of the product) can only be contained in one order.

Task 4

Create an ER Model for each of the following description (using Crow's Foot Notation/Martin)

a) Each company operates four departments and each department belongs to one company
b) Each department in part(a) employs one or more employees, and each employee works for one department
c) Each of the employee in part (b) may or may not have one or more dependents and each dependent belongs to one employee
d) Each employee in part (c)may or may not have an employment history
e) Represent all the ER model described in (a),(b),(c) and (d) as a single ER Model

The ER Model that can be formed as told in the explanation is the following