
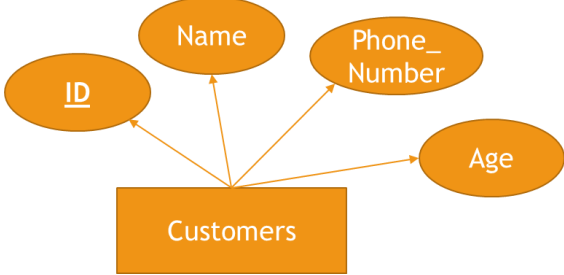


Entity Relationship Model Activity

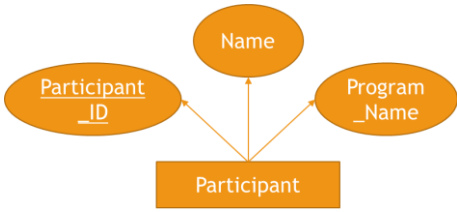
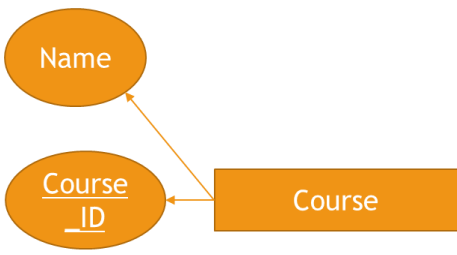
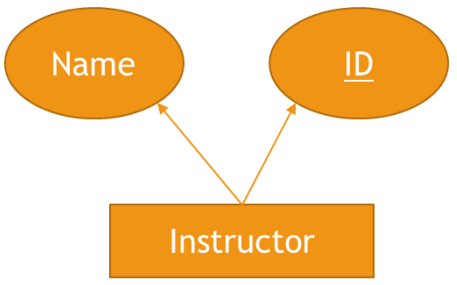
Review the following database scenarios, build the ER models, and convert it into tables.

What are the relationships between tables?

1. A retail store manager wants to organize their data into a relational database. Their data mainly is about the customers and the purchased items. Each customer has a name, ID, phone number, age, and each Item has item_ID, item_Price, item_Type.

 <p>The diagram shows an entity 'Item' (rectangle) connected to three attributes (ovals): 'Item_ID' (underlined), 'Item_Price', and 'Item_Type'.</p>	<table><tr><th colspan="2">Item</th></tr><tr><td>Item_ID</td><td>int(255)</td></tr><tr><td>Item_Price</td><td>Float(20)</td></tr><tr><td>Item_Type</td><td>Varchar(20)</td></tr></table>	Item		Item_ID	int(255)	Item_Price	Float(20)	Item_Type	Varchar(20)		
Item											
Item_ID	int(255)										
Item_Price	Float(20)										
Item_Type	Varchar(20)										
 <p>The diagram shows an entity 'Customers' (rectangle) connected to four attributes (ovals): 'ID' (underlined), 'Name', 'Phone_Number', and 'Age'.</p>	<table><tr><th colspan="2">Customers</th></tr><tr><td>ID</td><td>Int(255)</td></tr><tr><td>Name</td><td>Varchar(50)</td></tr><tr><td>Phone_Number</td><td>int(10)</td></tr><tr><td>Age</td><td>Float(20)</td></tr></table>	Customers		ID	Int(255)	Name	Varchar(50)	Phone_Number	int(10)	Age	Float(20)
Customers											
ID	Int(255)										
Name	Varchar(50)										
Phone_Number	int(10)										
Age	Float(20)										

2. At NPower Canada each participant has a Participant_ID, name, program_name. Participants can register in multiple courses. Each course has a name, course_ID. Multiple participants can register at the same course. Also, each instructor has a name and ID. Instructors can supervise multiple participants, however participants can have only one instructor.

	<table><tr><th colspan="2">Participant</th></tr><tr><td>Participant_ID</td><td>int(255)</td></tr><tr><td>Name</td><td>Varchar(50)</td></tr><tr><td>Program_Name</td><td>Varchar(50)</td></tr></table>	Participant		Participant_ID	int(255)	Name	Varchar(50)	Program_Name	Varchar(50)
Participant									
Participant_ID	int(255)								
Name	Varchar(50)								
Program_Name	Varchar(50)								
	<table><tr><th colspan="2">Course</th></tr><tr><td>Course_ID</td><td>int(20)</td></tr><tr><td>Name</td><td>Varchar(50)</td></tr></table>	Course		Course_ID	int(20)	Name	Varchar(50)		
Course									
Course_ID	int(20)								
Name	Varchar(50)								
	<table><tr><th colspan="2">Instructor</th></tr><tr><td>ID</td><td>int(60)</td></tr><tr><td>Name</td><td>Varchar(50)</td></tr></table>	Instructor		ID	int(60)	Name	Varchar(50)		
Instructor									
ID	int(60)								
Name	Varchar(50)								