

HW 4- Solution

Let's suppose that we add a new field « Delivery Countries» to the table «suppliers».

This new field contains the countries where a given supplier can deliver books.

One supplier can have many delivery countries.

Explain and manage the relationship between «countries» and «suppliers» in this case.

Check the database : book store -tables and relationships-many to many

Suppliers & Countries

Delivery countries field added

ID	COUNTRY	Cliquer pour ajouter
1	Abu Dhabi	
2	Afghanistan	
3	Albania	
4	Algeria	
5	American Samoa	
6	Andorra	
7	Angola	
8	Anguilla	
9	Antarctica	
10	Antigua:Barbuda	
11	Argentina	
12	Armenia	
13	Aruba	
14	Austral Oceania	
15	Australia	
16	Austria	
17	Azerbaijan	
18	Bahamas	
19	Bahrain	
20	Bangladesh	
21	Barbados	
22	Belarus	

- Each supplier can send orders (books) to Many countries.
- Each country can be supplied by Many suppliers.

It should be a **Many to Many** relationship. (don't confuse with one to many)

ID	supplier code	name	surname	payment	website	country	Delivery countries	Cliquer pour
1	AA01	ahmad	alawi	credit card	ketab.ma	Morocco	Iraq, Japan, Jordan, Morocco	
2	AP	antonio	patino	on line	book.com	Cyprus	France, Iran, Italy, Turkey	
3	BH	Bernard	hugo	dept	lire.com	France	Algeria, Nigeria, Palestine	
4	TB	Tessa	blair	cash	read.com	Turkey	Spain, Turkey, UAE, Ukraine, Vietnam	
5	SG	serena	gonza	other	knowledge.fr	France	Egypt, Tunisia, Turkmenistan, Yemen	
6	MA	Mohammed	al-durah	check	durah.com	Palestine	China, Kuwait, Lebanon, Libya	
*	(Nouv.)							

Suppliers

Supplier 1
Supplier 2
Supplier 4
⋮
Supplier i

Each Supplier appears
One time in
«Suppliers» and
corresponds to Many
countries in
«countries»

ONE

to

Countries

Country 115, country 121, country 122...
Country 86, country 114, country 244.....
Country 244.....
⋮
Country j, country k.....

Many

Countries

Country 244
Country 86
Country 181
⋮
Country i

ONE

to

Suppliers

Supplier 1, supplier 2
Supplier 2
Supplier 3
⋮
Supplier j, Supplier k...

Many

Parent (Countries)

One
Many

to
to

Child (Suppliers)

Many
one

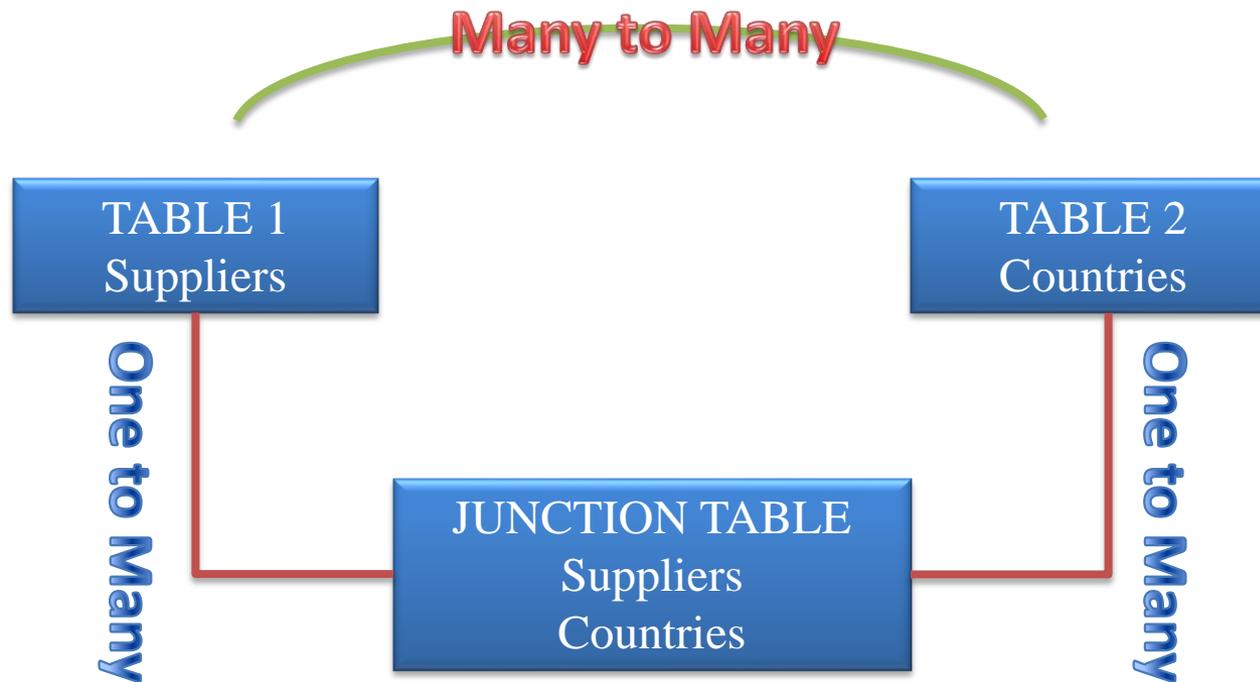
→ Many to Many

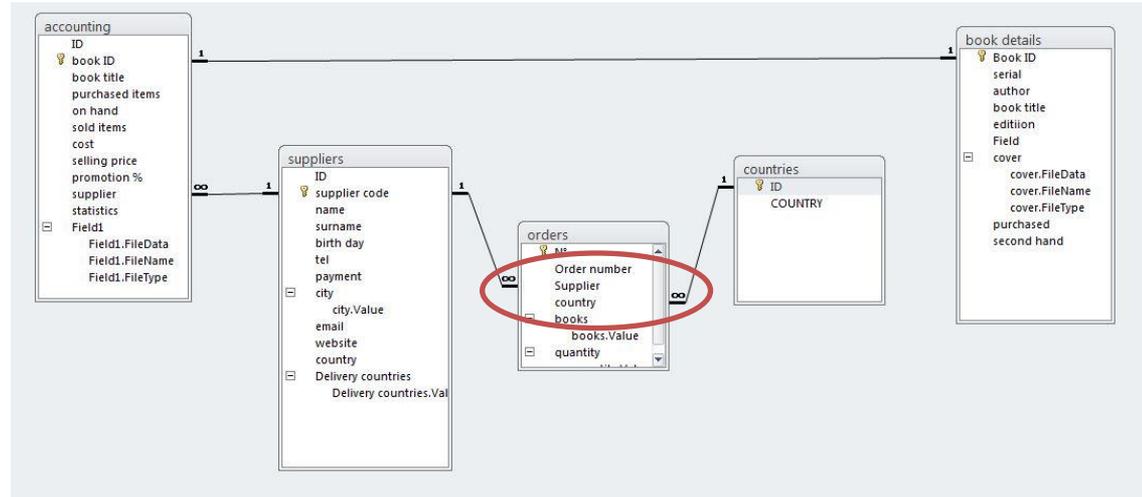
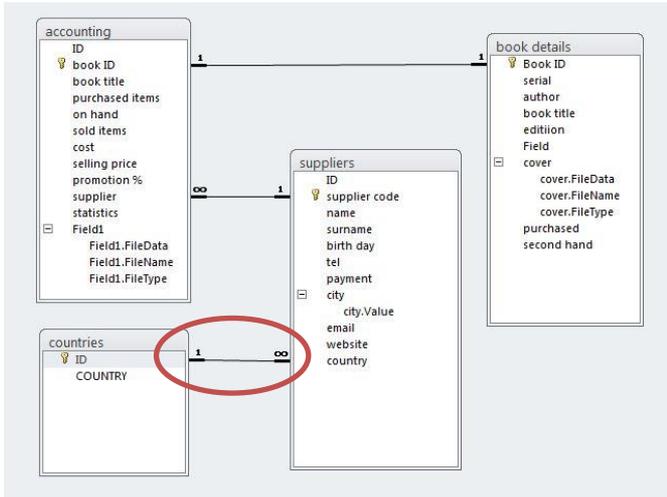
How to manage a Many to Many relationship in Access ?

When we are trying to connect the two «many» sides of a relationship. We obtain «Indeterminate» relationship.



So, we devide the «many to many» relationship into two «one to many relationship» by the intermediate of a junction table .(see your notes part 3-page 173)





Design the junction table

orders	
Field Name	Data Type
 N°	AutoNumber
Order number	Text
Supplier	Text
country	Number
books	Text
quantity	Text

orders						
N°	Order number	Supplier	country	books	quantity	
1	AP10/29/19	AP	Turkey	GO01, SM34	10, 6	
2	AA01/22/11/19	AA01	Jordan	IT37	15	
3	BH/12/12/2019	BH	Nigeria	FA23	17	
*	(Nouv.)					

