

Homework 3 solution

- Import an excel file containing the list of countries .
- Add the field «countries» to the suppliers table. (the countries where the suppliers atre located)
- Explain and manage the relationships between the tables.

(Check the file : book store -tables and relationships)

Relationships = Database Bridges



In order to manage the relationship, it is necessary to check the both directions (because many to many relationships are hidden in one to many relationships sometimes).

Table1 >>> Table2 <u>and</u> Tanble2 >>> table1.

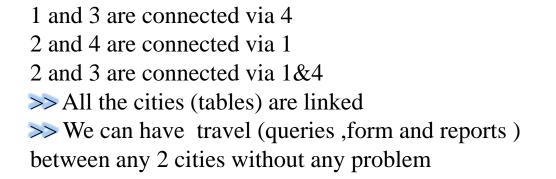
Our tables are :

1-Book details2-Suppliers3-Accounting4-Countries

We ca	n have $\binom{4}{2}$	= 6 relationships :
1&2	1 & 3	1&4
2&3	2&4	3 & 4

If we have to connect four cities ,is it logic to construct bridges between each two of them ? It means 6 bridges !!!

Of course not, because it is a loss of time and energy. So if we have to connect four cities, we can use only 3 bridges instead of 6.



In order to create a meaningful relationship between two tables they should have a common field.So the relationships that we can have are :

1-Book details & Accounting
2-Suppliers & Accounting
3-Suppliers & Countries

1-Book details & Accounting

bo	ok details															
	serial	* †	Book ID	*	author	*	book title	*	editiion							
Ŧ	1		DA06		Douglas C.Montgomer	ry	design and analy of experiment		8							
Ŧ	2		FA23		ruchi goya	1	financial accoun	ting	4							
Ŧ	3		SM34		Daniel T.Kapl	lan	statistical mode	ling	5		ccounting					
Ŧ	4		6001		Eliyahu		the goal		3		ID	-1	book ID	-	book title 👻	purchased items
					M.Goldratt	t				Ŧ		1	GO01		the goal	10
÷	5		DE05		Jiju antony	y	Design of		1							
							experiments			Ŧ		2	DE05		Design of experiments	20
+	6		PPO2		s.k		Production plann	-	2							
					mukhopadhy	ay	and control			Ŧ		3	PP02		Production planning and	5
Đ	7		MA09		R.S.N pillai		Management		2						control	
					bagavati		Accounting			+		4	MA09		Management Accounting	6
÷	8		OR01		hamdy A.tah	na	Operations Rese	arch	7						-	
										Ŧ		5	OR01		Operations Research	9
Ŧ	9		IT37		John M.jordo	an	Information thechnology ar		1							
	(Nouv.))								Ŧ		6	IT37		Information thechnology and innovation	12
						_				+		7	SM34		statistical modeling	7

+

±

8

9

(Nouv.)

DA06

FA23

design and analysis of

experiments financial accounting

8

8

We are doing the accounting once for each book . It should be **<u>one to one</u>** relationship.

Book details book1 book2 i book i ONE	Each book appears One time in «book details» and One time in «accounting»	Accounting book1 book2 book i ONE
Accounting book1 book2 book i ONE	Each book appears One time in «accounting» and One time in «book details»	Book details book1 book2 book i ONE

Parent (book details)		Child (accounting)			
One	to	one		na t	o One
One	to	one	_		



	ID 🚽	book ID	 book title 	-	cost 🔹	selling price -	supplier 👻	Click to
Ŧ	1	GO01	the goal		70	90	AP	
Ŧ	2	DE05	Design of experim	ents	80	100	ВН	
Ŧ	3	PP02	Production plannin control	g and	100	150	AP	
Ŧ	4	MA09	Management Accou	Inting	45	60	AA01	
Đ	5	OR01	Operations Resea	arch	35	40	ТВ	
Ŧ	6	IT37	Information thechnolo innovation	ogy and	200	230	AA01	
Ŧ	7	SM34	statistical model	ing	60	80	AP	
+	8	DA06	design and analys experiments	is of	50	60	AP	
Ŧ	9	FA23	financial account	ing	40	50	ВН	
	(New)							
	Total			9	75,555555555555555555555555555555555555			

- We are buying each book from one supplier . We don't buy the same book from different supplier.
- But we can buy many books from a given supplier.

It should be a <u>one to many</u> relationship.

	ID	 supplier code 	name 👻	surname 🔹	tel	- payment -	email 🔹	website 🔻	country	 Cliquer por
ŧ	1	AA01	ahmad	alawi	(0212)-661-145-84-24	credit card	alawi@hotmail.com	ketab.ma	Morocco	
Ð	2	AP	antonio	patino	(0090)-588-352-14-45	on line	anto@yahoo.fr	book.com	Cyprus	
Ŧ	3	BH	Bernard	hugo	(0232)-661-457-85-12	dept	bernardo@gmail.com	lire.com	France	
Ð	5	SG	serena	gonza	(0852)-147-963-15-78	other	serena@gmail.com	knowledge.fr	France	
Ŧ	4	ТВ	Tessa	blair	(0475)-842-158-96-31	cash	tessa@yahoo.fr	read.com	Turkey	
Ð	10	MA	Mohammed	al-durah	(0034)-545-866-78-76	check	durah@gmail.com	durah.com	Palestine	
	(Nouv.)									

Suppliers Supplier 1		Accounting book 6 ,book 4
Supplier 2 Supplier i	Each Supplier appears One time in «Suppliers» and many times in «accounting»	book 1,book 3 book i,book j
ONE	to	Many
Accounti	ing	Suppliers
Accounti book1	ing	Suppliers Supplier 2
	Each book appears One tim	Supplier 2 ^{e in} Supplier 3
book1	Each book appears One tim «accounting» and One tim	Supplier 2 ^{e in} Supplier 3
book1	Each book appears One tim	Supplier 2 ^{e in} Supplier 3

Parent (Suppliers)	Chi	ld (accounting)		
One	to	Many	One to	Many
One	to	one		

3-Suppliers & Countries

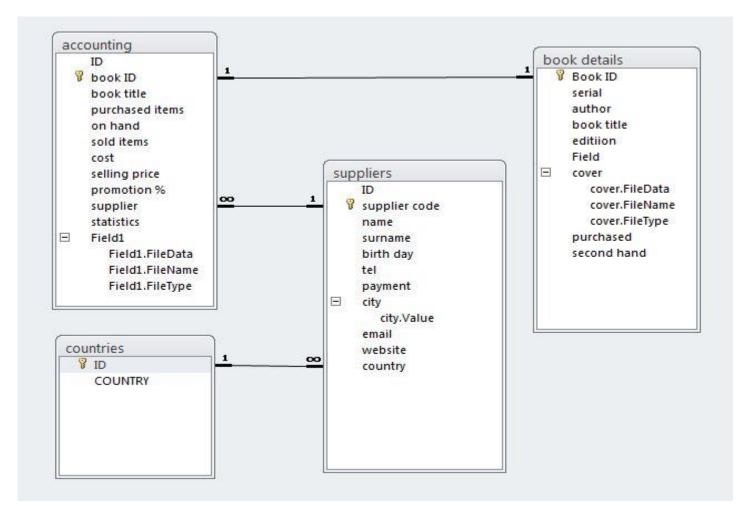
	ID	-	COUNTRY -	-	Cliquer p	our ajouter	-
+	1		Abu Dhabi				
Ŧ	2		Afghanistan				
(H)	3		Albania				
Ŧ	4		Algeria				
Ŧ	5		American Samoa				
÷	6		Andorra				
(+)	7		Angola				
+	8		Anguilla				
Đ	9		Antarctica				
Ŧ	10		Antigua:Barbuda				
(±	11		Argentina				
+	12		Armenia				
Ŧ	13		Aruba				
+	14		Austral Oceania				
(H)	15		Australia				
+	16		Austria				
Đ	17		Azerbaijan				
•	18		Bahamas				
(H)	19		Bahrain				
Ŧ	20		Bangladesh				
Ŧ	21		Barbados				
Ð	22		Belarus				
Ŧ	23		Belgium 📃	5	uppliers		
Đ	24		Belgium-Luxem		ID .	supplier code	- nan
Ŧ	25		Belize	+	1	AA01	ahr
				Ŧ	2	AP	ant
				Ŧ			
					3	BH	Ber
				Ŧ	5	SG	ser
				+	4	TB	Te

- Each supplier lives in one country (address).
- Many suppliers can share the same country.

It should be a **<u>One to many</u>** relationship.

m		ID 🔹	supplier code 👻	name 🔹	surname 🔹	tel	payment -	email 🔹	website 🔹	country - Cliquer p
	Ŧ	1	AA01	ahmad	alawi	(0212)-661-145-84-24	credit card	alawi@hotmail.com	ketab.ma	Morocco
	Ŧ	2	AP	antonio	patino	(0090)-588-352-14-45	on line	anto@yahoo.fr	book.com	Cyprus
	Ŧ	3	BH	Bernard	hugo	(0232)-661-457-85-12	dept	bernardo@gmail.com	lire.com	France
	Ŧ	5	SG	serena	gonza	(0852)-147-963-15-78	other	serena@gmail.com	knowledge.fr	France
	+	4	ТВ	Tessa	blair	(0475)-842-158-96-31	cash	tessa@yahoo.fr	read.com	Turkey
	Ŧ	10	MA	Mohammed	al-durah	(0034)-545-866-78-76	check	durah@gmail.com	durah.com	Palestine
*		(Nouv.)								

Suppliers Supplier 1 Supplier 2 Supplier 3 Supplier 5 Supplier i ONE	Each Supplier appears Or time in «Suppliers» and corresponds to one coun- in «countries»	Country <u>86</u>
Countries Country 159 Country 66 Country 86 Country i ONE	Each Country appears One time in «Countries» and Many times in «Suppliers» to	Suppliers Supplier 1 Supplier 2 Supplier 3,Supplier 5 Supplier j,Supplier k
arent (Countries) One One	Child (Suppliers) to Many to one	One to I



HW 4

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.

Send your answers <u>(before 6 november</u>) by email to : <u>khaoula.chnina@cc.emu.edu.tr</u>

The answers will be available on line before the quiz .

New field : Delivery coutries



suppliers										
ID	* 1	supplier code 🔹	name 🔹	surname	- paymen	t 🔻	website 👻	country	Delivery countries	- Cliquer p
]	1	AA01	ahmad	alawi	credit car	d	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	ТВ	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	
(N	louv.)									
		ID +1 1 2 3 3 4 5	ID I Supplier code I AA01 AA01 AP AB AB AB AB AB AB AB AB AB AB AB AB AB	IDIsupplier codename1AA01ahmad2APantonio3BHBernard4TBTessa5SGserena6MAMohammed	IDIsupplier codenamesurname1AA01ahmadalawi2APantoniopatino3BHBernardhugo4TBTessablair5SGserenagonza6MAMohammedal-durah	IDIsupplier codenamesurnamepaymen1AA01ahmadalawicredit car2APantoniopatinoon line3BHBernardhugodept4TBTessablaircash5SGserenagonzaother6MAMohammedal-durahcheck	IDIsupplier codenamesurnamepayment1AA01ahmadalawicredit card2APantoniopatinoon line3BHBernardhugodept4TBTessablaircash5SGserenagonzaother6MAMohammedal-durahcheck	IDIsupplier codenamesurnamepaymentwebsite1AA01ahmadalawicredit cardketab.ma2APantoniopatinoon linebook.com3BHBernardhugodeptlire.com4TBTessablaircashread.com5SGserenagonzaotherknowledge.fr6MAMohammedal-durahcheckdurah.com	IDIsupplier codenamesurnamepaymentwebsitecountry1AA01ahmadalawicredit cardketab.maMorocco2APantoniopatinoon linebook.comCyprus3BHBernardhugodeptlire.comFrance4TBTessablaircashread.comTurkey5SGserenagonzaotherknowledge.frFrance6MAMohammedal-durahcheckdurah.comPalestine	IDIsupplier codenamesurnamepaymentwebsitecountryDelivery countries1AA01ahmadalawicredit cardketab.maMoroccoIraq, Japan, Jordan, Morocco2APantoniopatinoon linebook.comCyprusFrance, Iran, Italy, Turkey3BHBernardhugodeptlire.comFranceAlgeria, Nigeria, Palestine4TBTessablaircashread.comTurkeySpain, Turkey, UAE, Ukraine, Vietnam5SGserenagonzaotherknowledge.frFranceEgypt, Tunisia, Turkmenistan, Yemen6MAMohammedal-durahcheckdurah.comPalestineChina, Kuwait, Lebanon, Libya