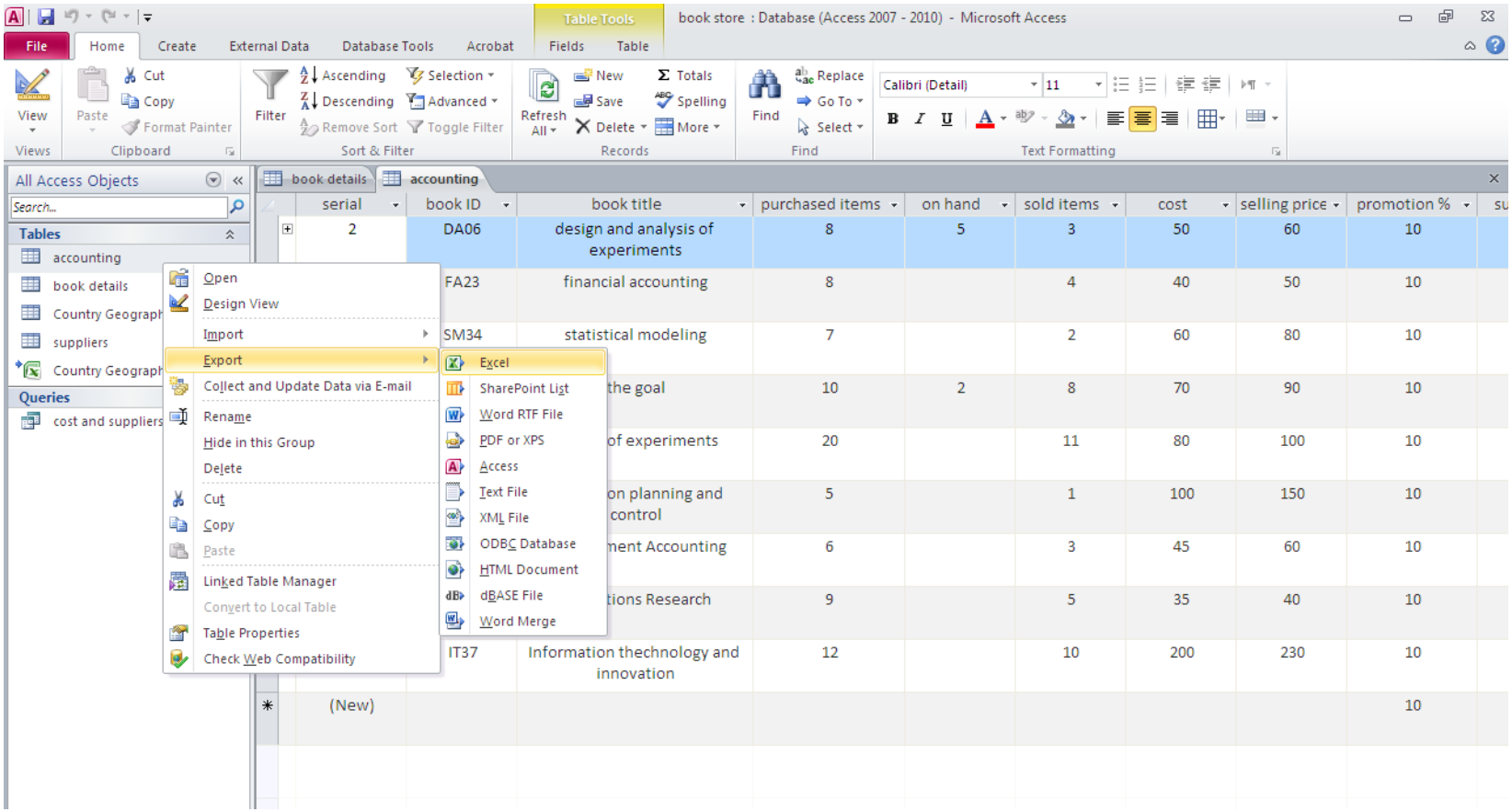
Information Systems and Technology
IENG372 / MANE372

Access LAB – Part 3

By : Khaoula Chnina

Export file


book store : Database (Access 2007 - 2010) - Microsoft Access
Table Tools
File
Home
Create
External Data
Database Tools
Acrobat
Fields
Table
All Access Objects
Search...
Tables
accounting
book details
Country Geograph
suppliers
Country Geograph
Queries
cost and suppliers
book details
accounting
Open
Design View
Import
Export
Collect and Update Data via E-mail
Rename
Hide in this Group
Delete
Cut
Copy
Paste
Linked Table Manager
Convert to Local Table
Table Properties
Check Web Compatibility
Excel
SharePoint List
Word RTF File
PDF or XPS
Access
Text File
XML File
ODBC Database
HTML Document
dBASE File
Word Merge
serial
book ID
book title
purchased items
on hand
sold items
cost
selling price
promotion %
2
DA06
design and analysis of experiments
8
5
3
50
60
10
FA23
financial accounting
8
4
40
50
10
SM34
statistical modeling
7
2
60
80
10
10
2
8
70
90
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11
80
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100
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6
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35
40
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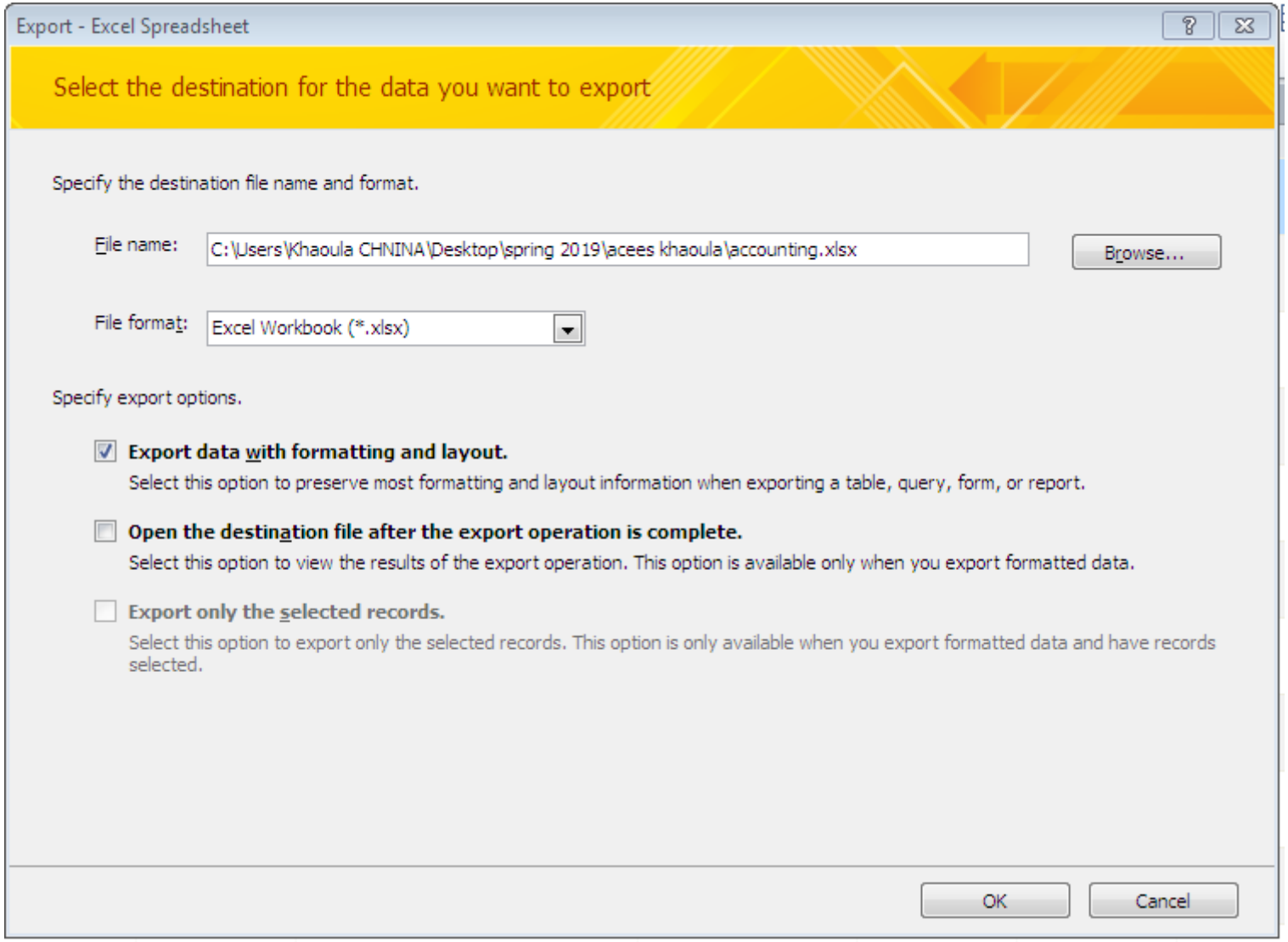
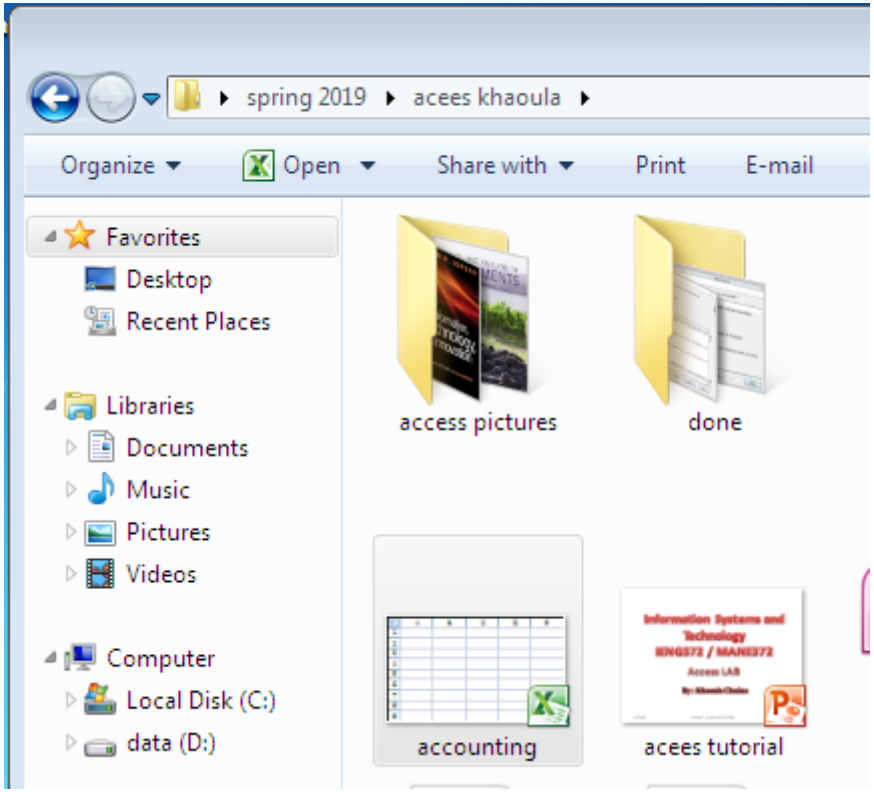
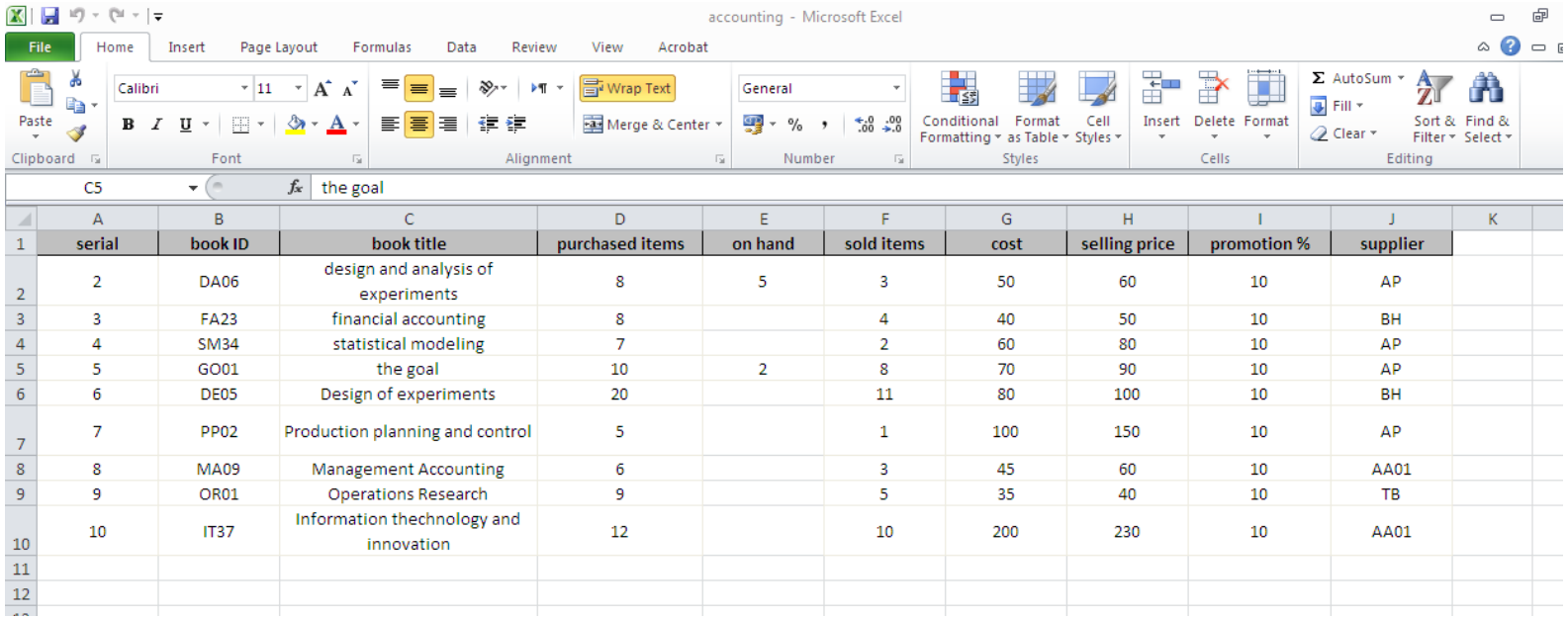
IT37
Information thechnology and innovation
12
10
200
230
10
(New)
10


Export - Excel Spreadsheet
Select the destination for the data you want to export
Specify the destination file name and format.
File name:
C:\Users\Khaoula CHNINA\Desktop\spring 2019\acees khaoula\accounting.xlsx
Browse...
File format:
Excel Workbook (*.xlsx)
Specify export options.
Export data with formatting and layout.
Select this option to preserve most formatting and layout information when exporting a table, query, form, or report.
Open the destination file after the export operation is complete.
Select this option to view the results of the export operation. This option is available only when you export formatted data.
Export only the selected records.
Select this option to export only the selected records. This option is only available when you export formatted data and have records selected.
OK
Cancel

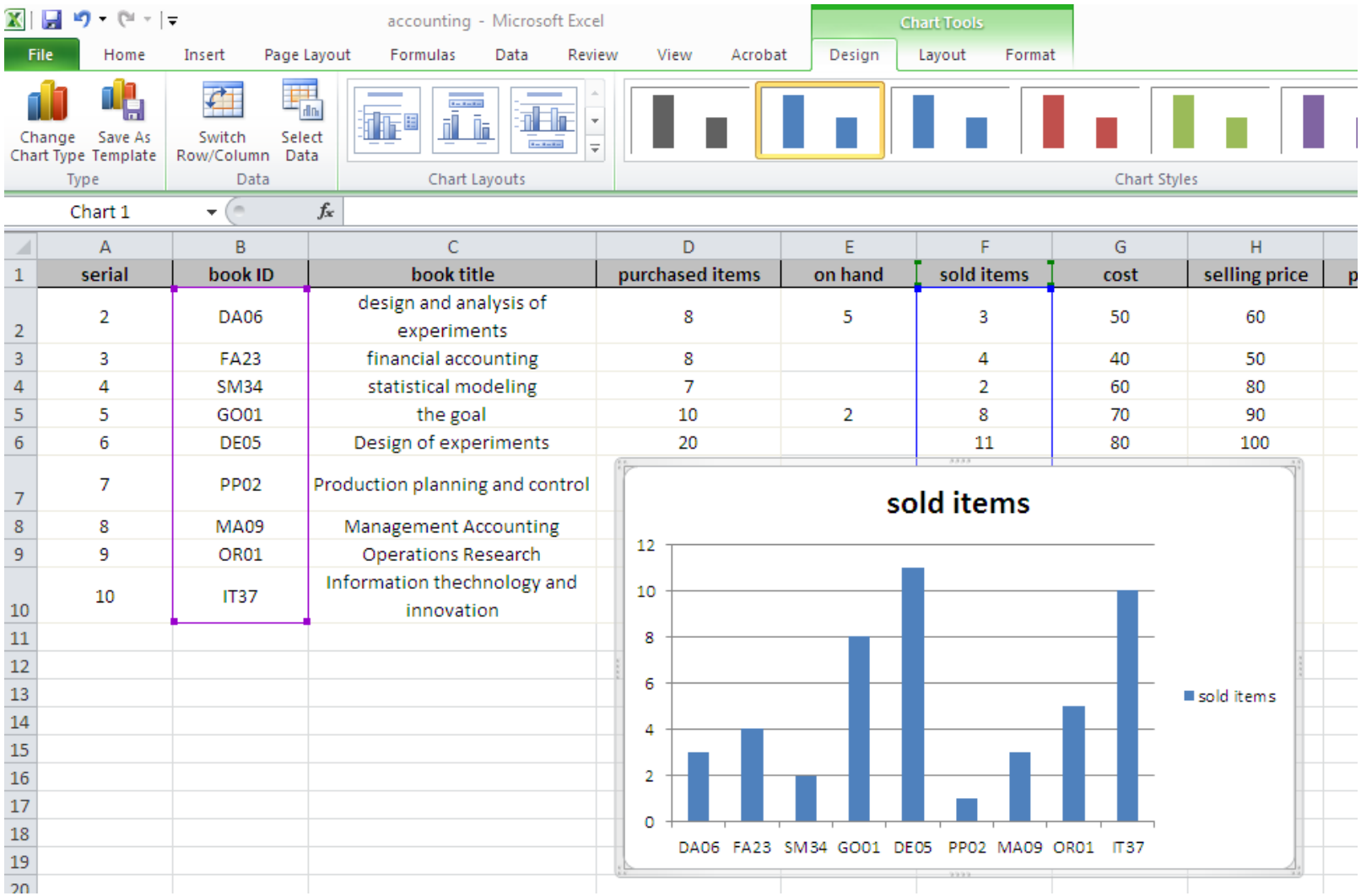
And here it appears





	A	B	C	D	E	F	G	H	I	J	K
1	serial	book ID	book title	purchased items	on hand	sold items	cost	selling price	promotion %	supplier	
2	2	DA06	design and analysis of experiments	8	5	3	50	60	10	AP	
3	3	FA23	financial accounting	8		4	40	50	10	BH	
4	4	SM34	statistical modeling	7		2	60	80	10	AP	
5	5	GO01	the goal	10	2	8	70	90	10	AP	
6	6	DE05	Design of experiments	20		11	80	100	10	BH	
7	7	PP02	Production planning and control	5		1	100	150	10	AP	
8	8	MA09	Management Accounting	6		3	45	60	10	AA01	
9	9	OR01	Operations Research	9		5	35	40	10	TB	
10	10	IT37	Information thechnology and innovation	12		10	200	230	10	AA01	
11											
12											

You can use the existing data to draw charts…. Use all the options of excel



	A	B	C	D	E	F	G	H
1	serial	book ID	book title	purchased items	on hand	sold items	cost	selling price
2	2	DA06	design and analysis of experiments	8	5	3	50	60
3	3	FA23	financial accounting	8		4	40	50
4	4	SM34	statistical modeling	7		2	60	80
5	5	GO01	the goal	10	2	8	70	90
6	6	DE05	Design of experiments	20		11	80	100
7	7	PP02	Production planning and control					
8	8	MA09	Management Accounting					
9	9	OR01	Operations Research					
10	10	IT37	Information thechnology and innovation					
11								
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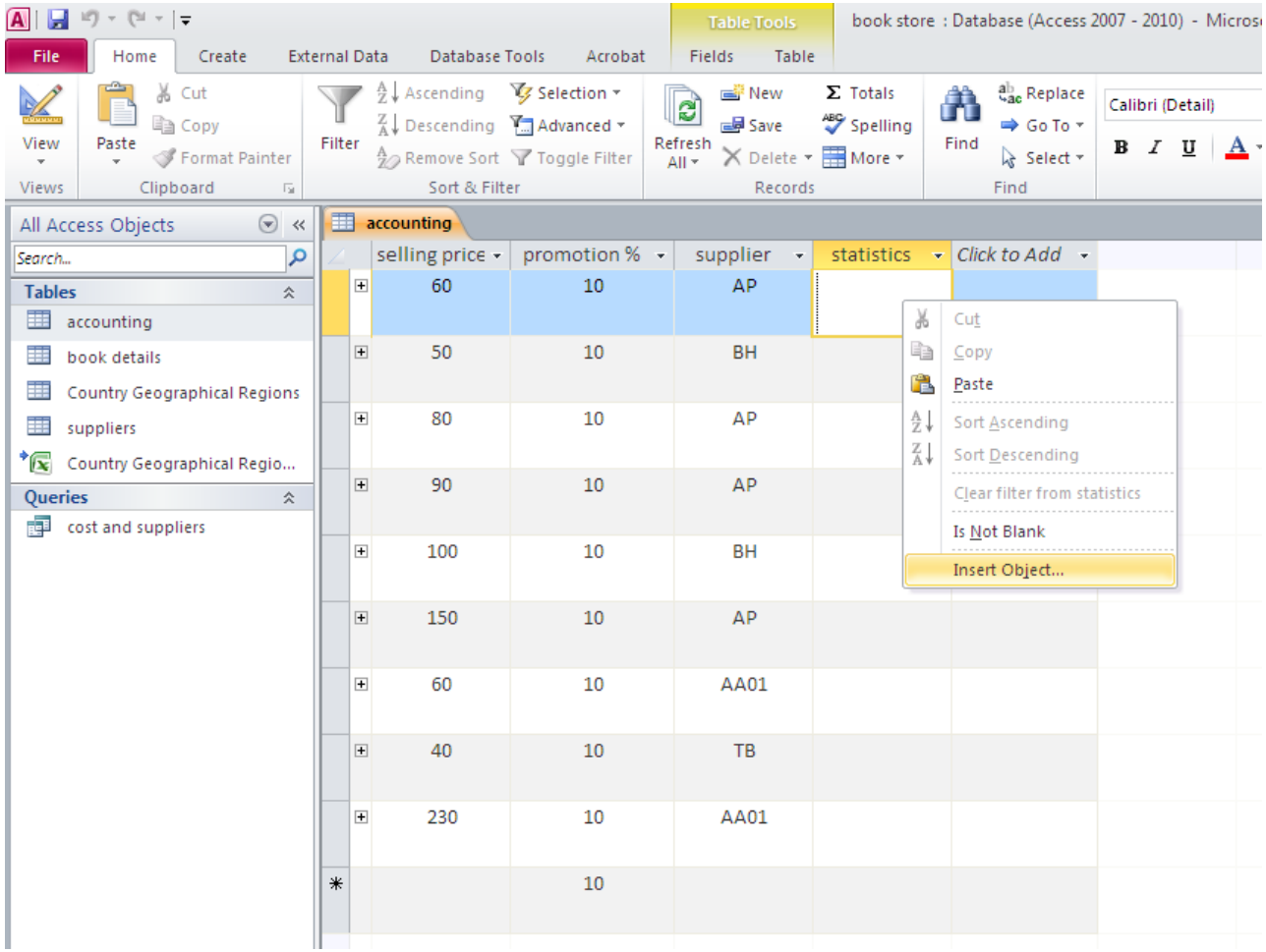
Object Linking & Embedding (OLE)

Object Linking & Embedding (**OLE**) is a proprietary technology developed by Microsoft that allows embedding
and linking to documents and other objects

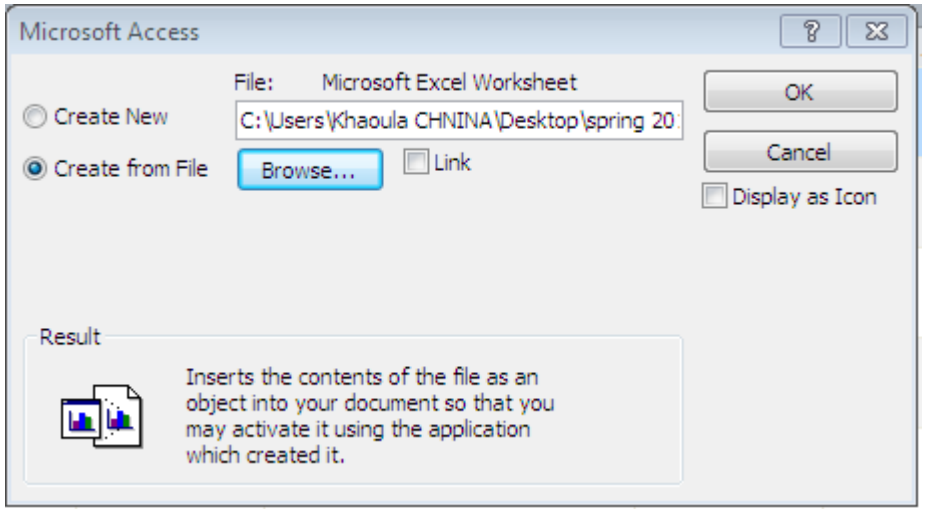
book details | accounting

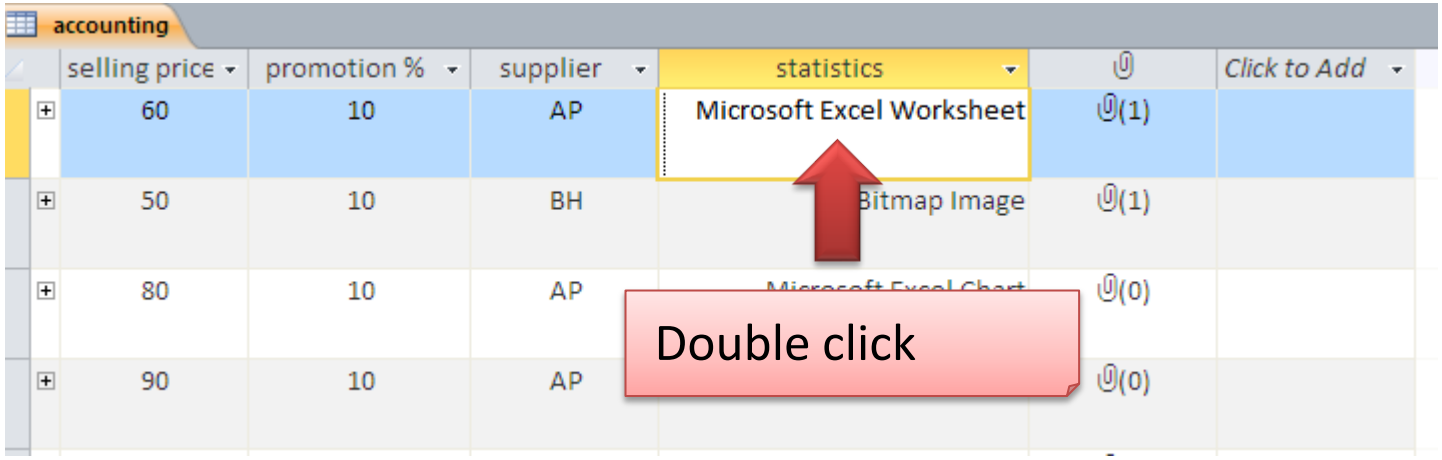
Field Name	Data Type
serial	AutoNumber
book ID	Text
book title	Text
purchased items	Number
on hand	Number
sold items	Number
cost	Number
selling price	Number
promotion %	Number
supplier	Text
statistics	OLE Object

Add new field : statistics

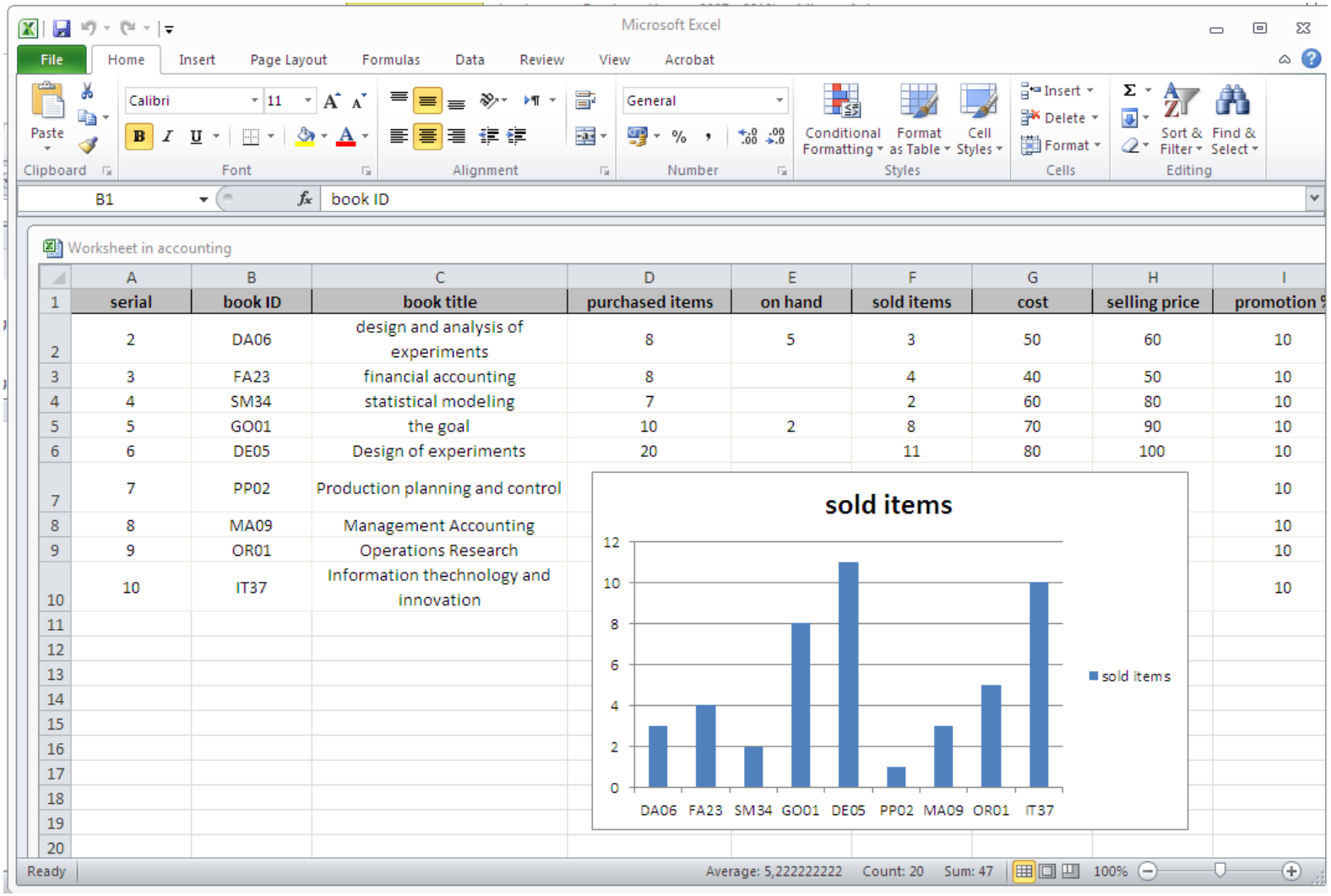

book store : Database (Access 2007 - 2010) - Micros
Table Tools
File
Home
Create
External Data
Database Tools
Acrobat
Fields
Table
View
Paste
Cut
Copy
Format Painter
Filter
Ascending
Descending
Remove Sort
Selection
Advanced
Toggle Filter
Refresh All
New
Save
Delete
Totals
Spelling
More
Find
Replace
Go To
Select
Calibri (Detail)
Views
Clipboard
Sort & Filter
Records
Find
All Access Objects
Search...
Tables
accounting
book details
Country Geographical Regions
suppliers
Country Geographical Regio...
Queries
cost and suppliers
accounting
selling price
promotion %
supplier
statistics
Click to Add
60 10 AP
50 10 BH
80 10 AP
90 10 AP
100 10 BH
150 10 AP
60 10 AA01
40 10 TB
230 10 AA01
10
Cut
Copy
Paste
Sort Ascending
Sort Descending
Clear filter from statistics
Is Not Blank
Insert Object...

Create from a file





The file that you had chosen appears



	A	B	C	D	E	F	G	H	I
1	serial	book ID	book title	purchased items	on hand	sold items	cost	selling price	promotion 9
2	2	DA06	design and analysis of experiments	8	5	3	50	60	10
3	3	FA23	financial accounting	8		4	40	50	10
4	4	SM34	statistical modeling	7		2	60	80	10
5	5	GO01	the goal	10	2	8	70	90	10
6	6	DE05	Design of experiments	20		11	80	100	10
7	7	PP02	Production planning and control						10
8	8	MA09	Management Accounting						10
9	9	OR01	Operations Research						10
10	10	IT37	Information thechnology and innovation						10
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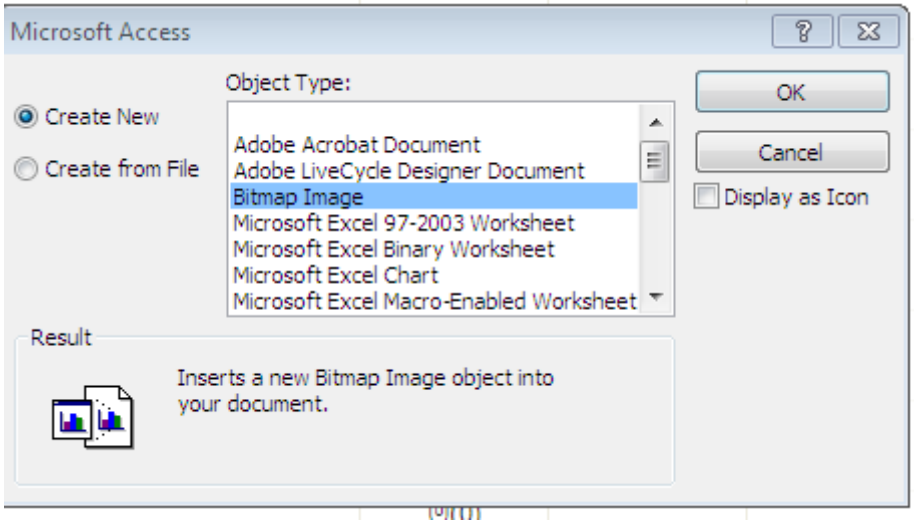
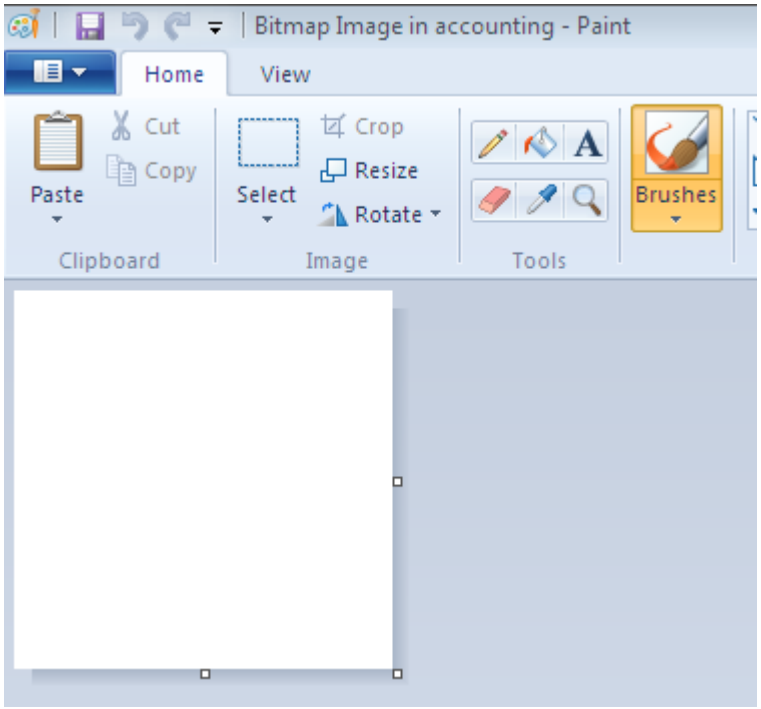
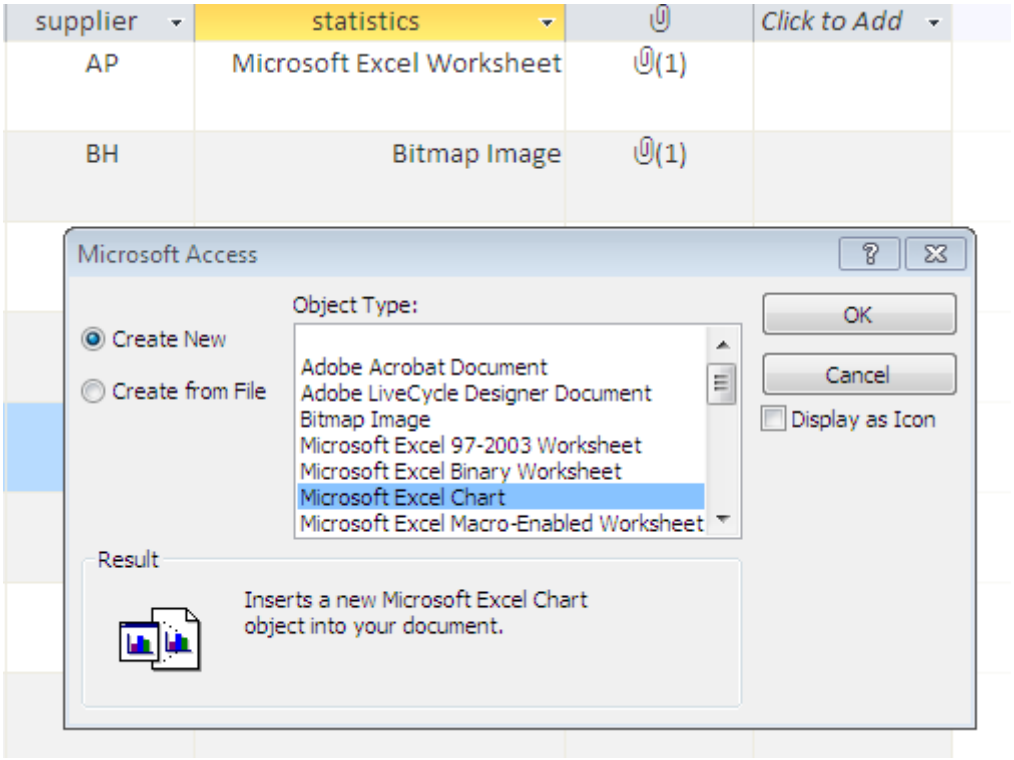


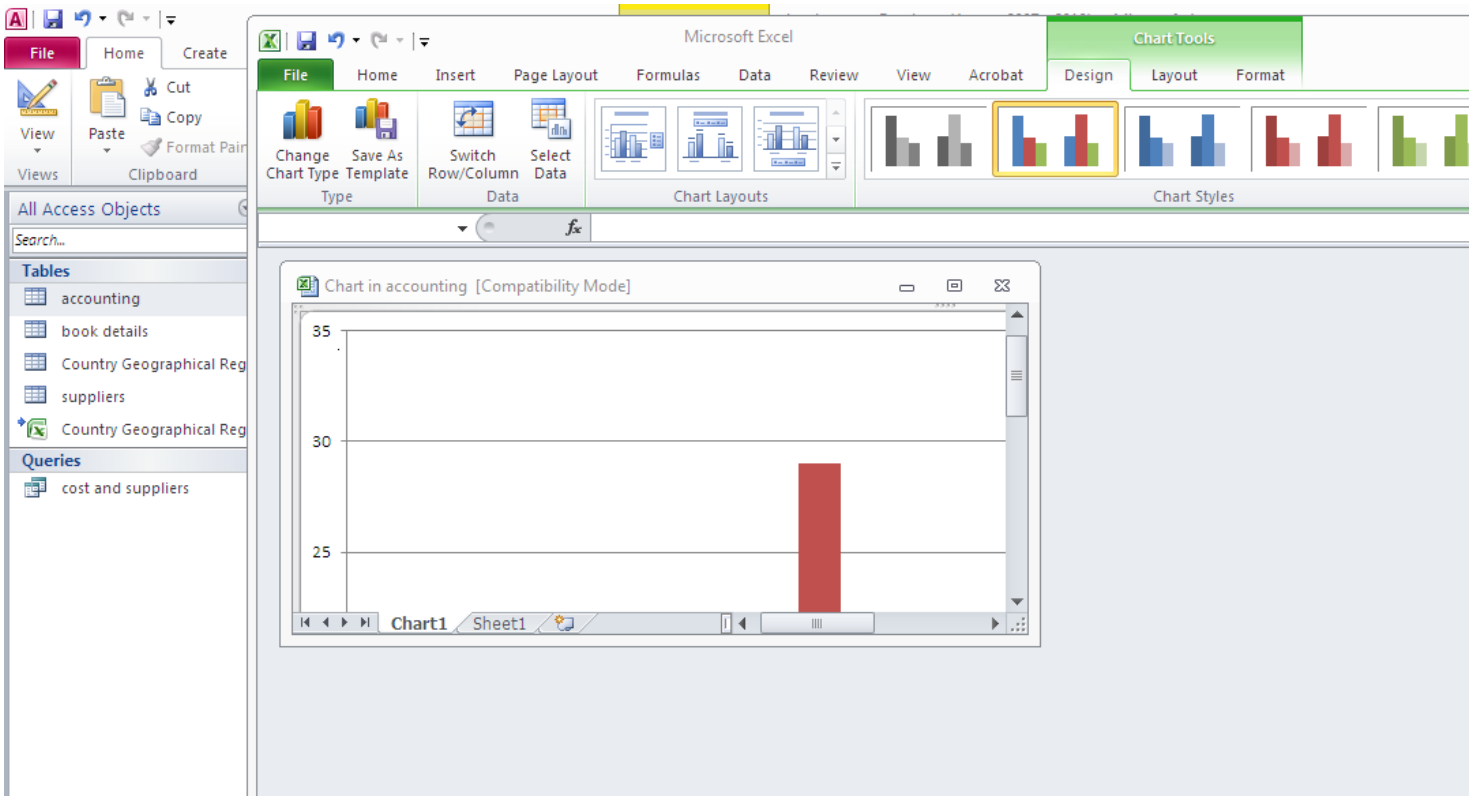
Create new



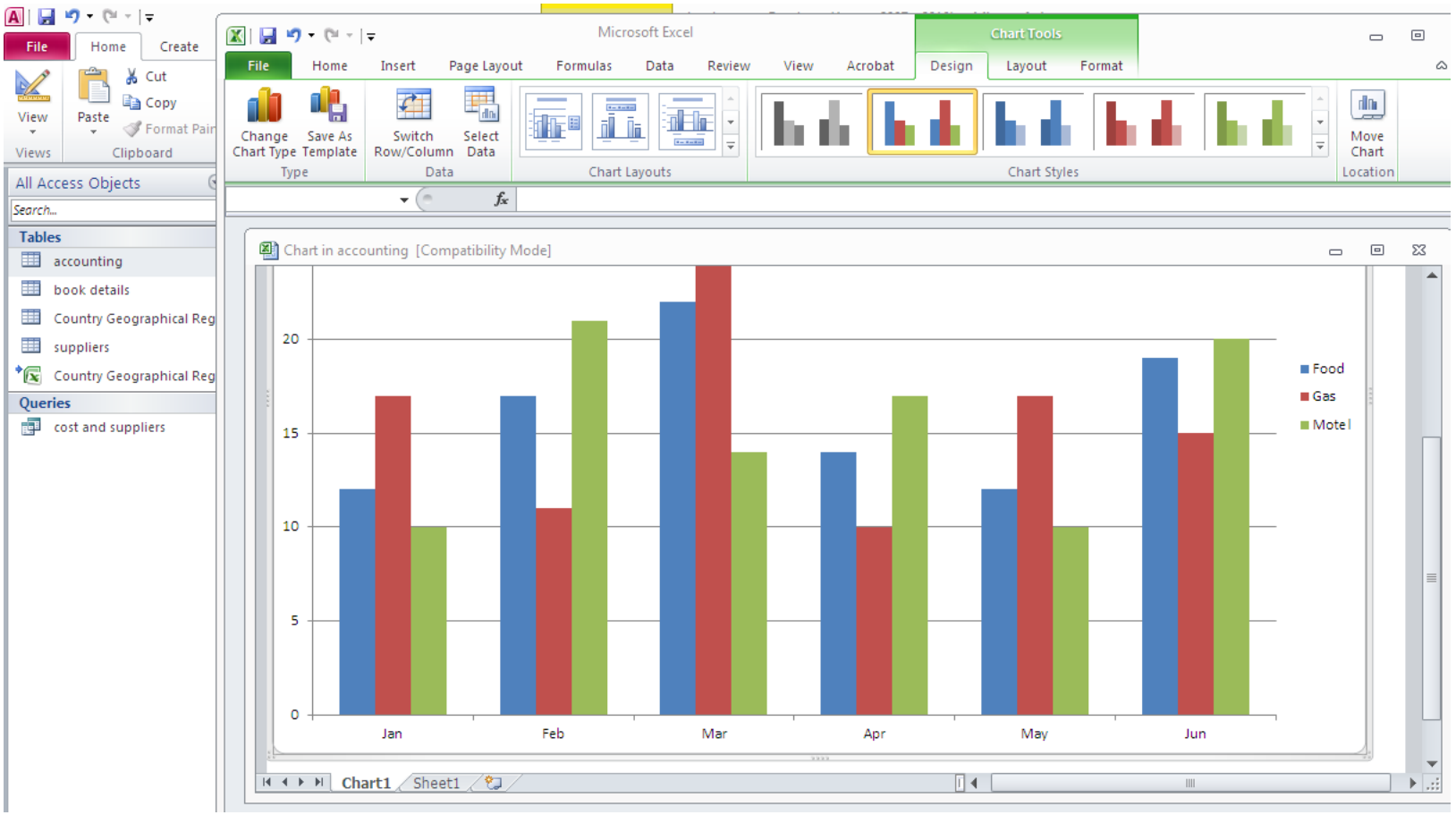
image

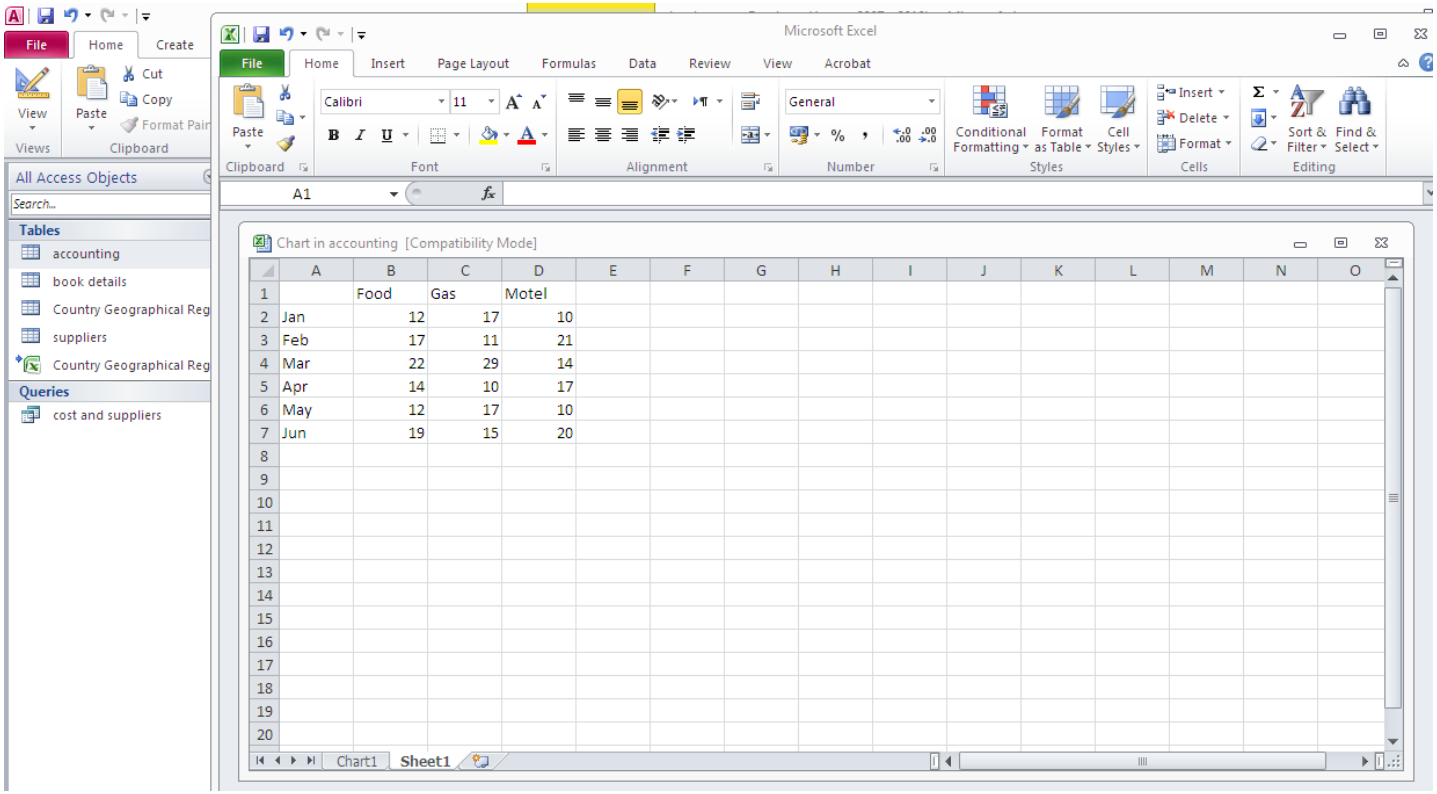
Create new chart




File
Home
Create
Cut
Copy
Format Pair
View
Paste
Views
Clipboard
All Access Objects
Search...
Tables
accounting
book details
Country Geographical Reg
suppliers
Country Geographical Reg
Queries
cost and suppliers
Microsoft Excel
Chart Tools
File
Home
Insert
Page Layout
Formulas
Data
Review
View
Acrobat
Design
Layout
Format
Change Chart Type
Save As Template
Type
Switch Row/Column
Select Data
Data
Chart Layouts
Chart Styles
Chart in accounting [Compatibility Mode]
35
30
25
Chart1
Sheet1

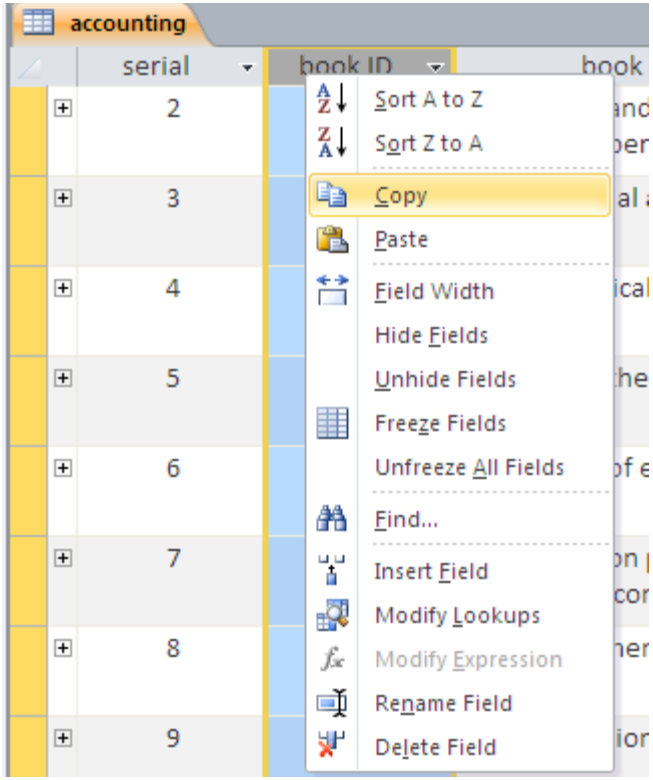
Existing chart by default : you have to modify it.
It contains 2 sheets : one for the data ,another for the chart

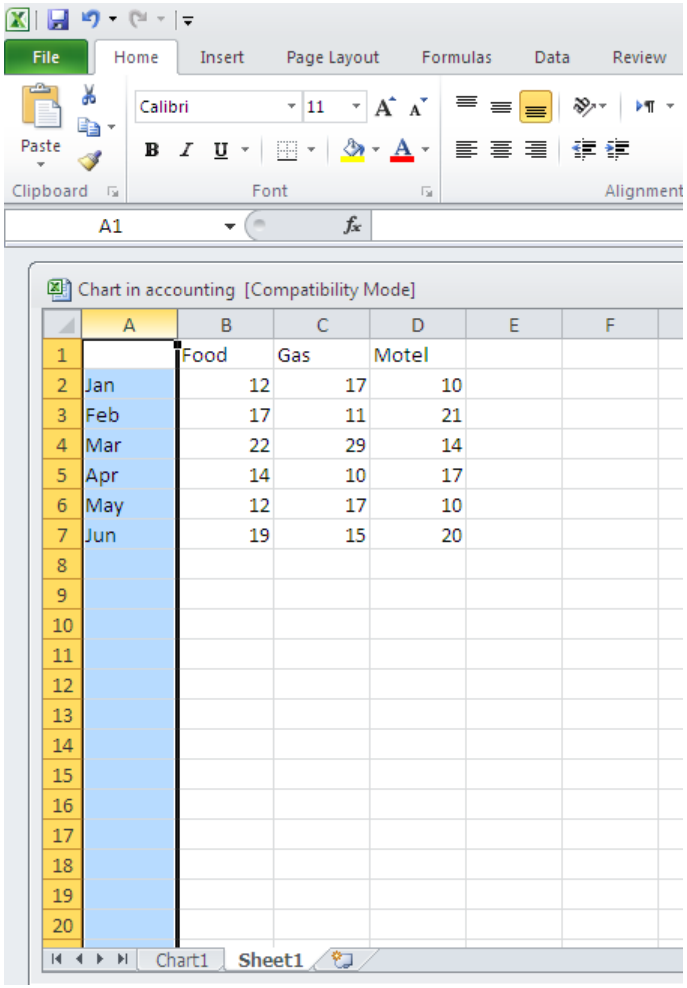


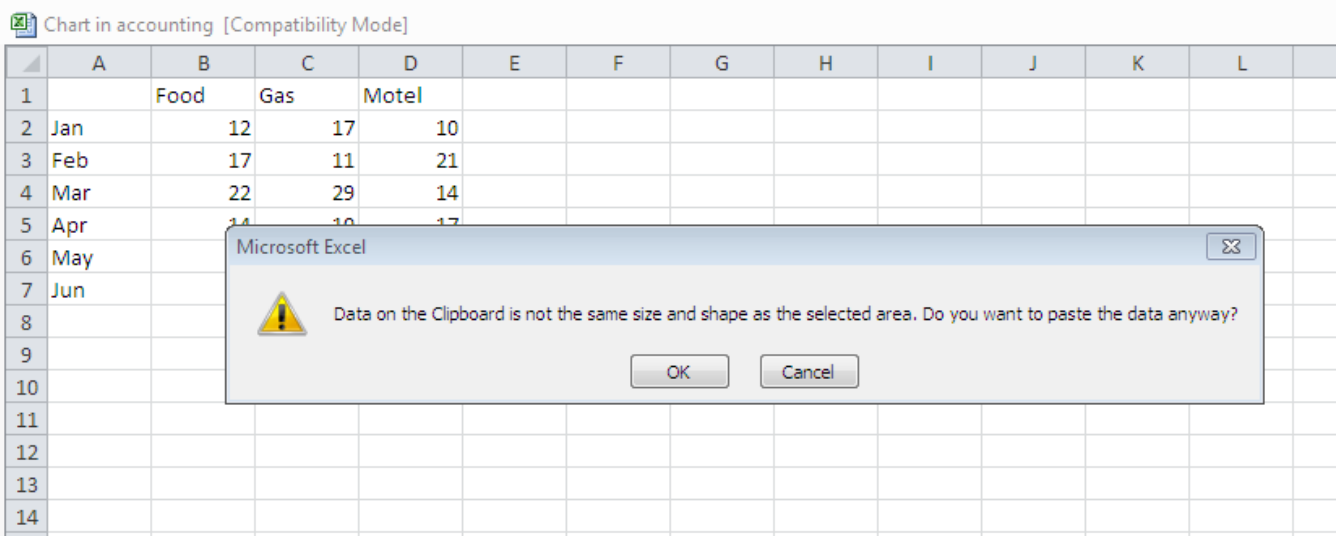


	A	B	C	D
1		Food	Gas	Motel
2	Jan	12	17	10
3	Feb	17	11	21
4	Mar	22	29	14
5	Apr	14	10	17
6	May	12	17	10
7	Jun	19	15	20

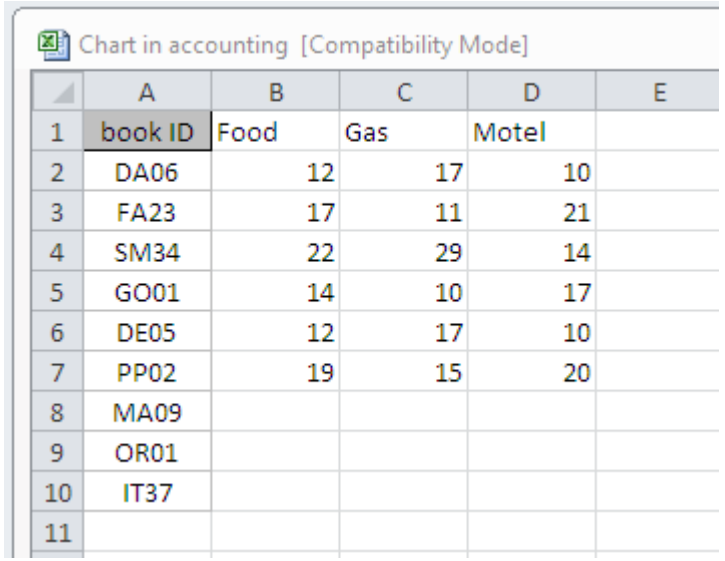
let's modify it:
We will copy the data from our accounting table to the sheet of data



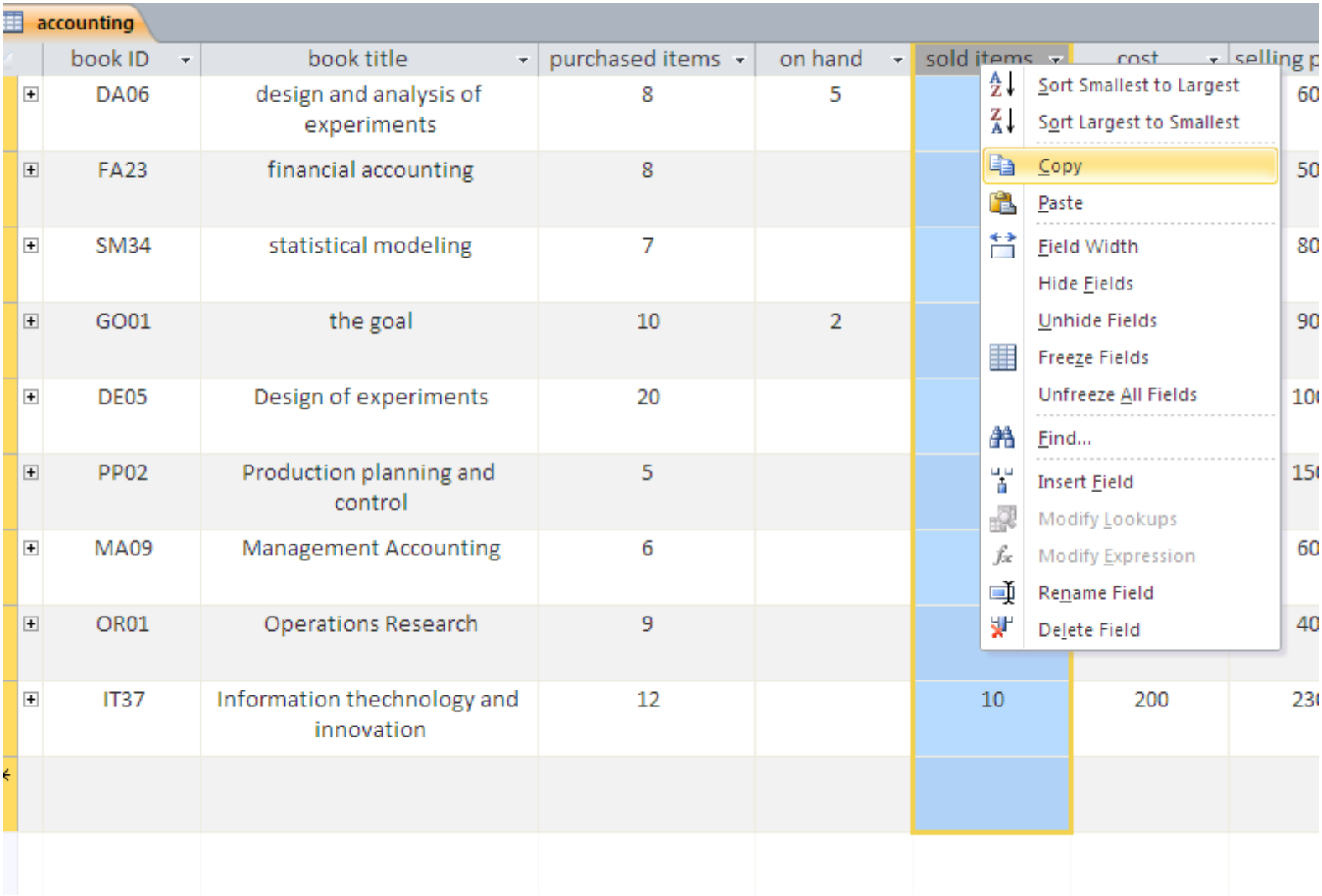


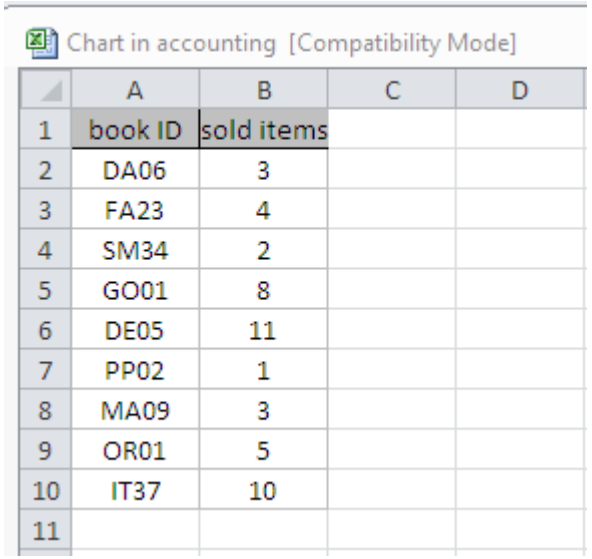


	A	B	C	D
1		Food	Gas	Motel
2	Jan	12	17	10
3	Feb	17	11	21
4	Mar	22	29	14
5	Apr			
6	May			
7	Jun			



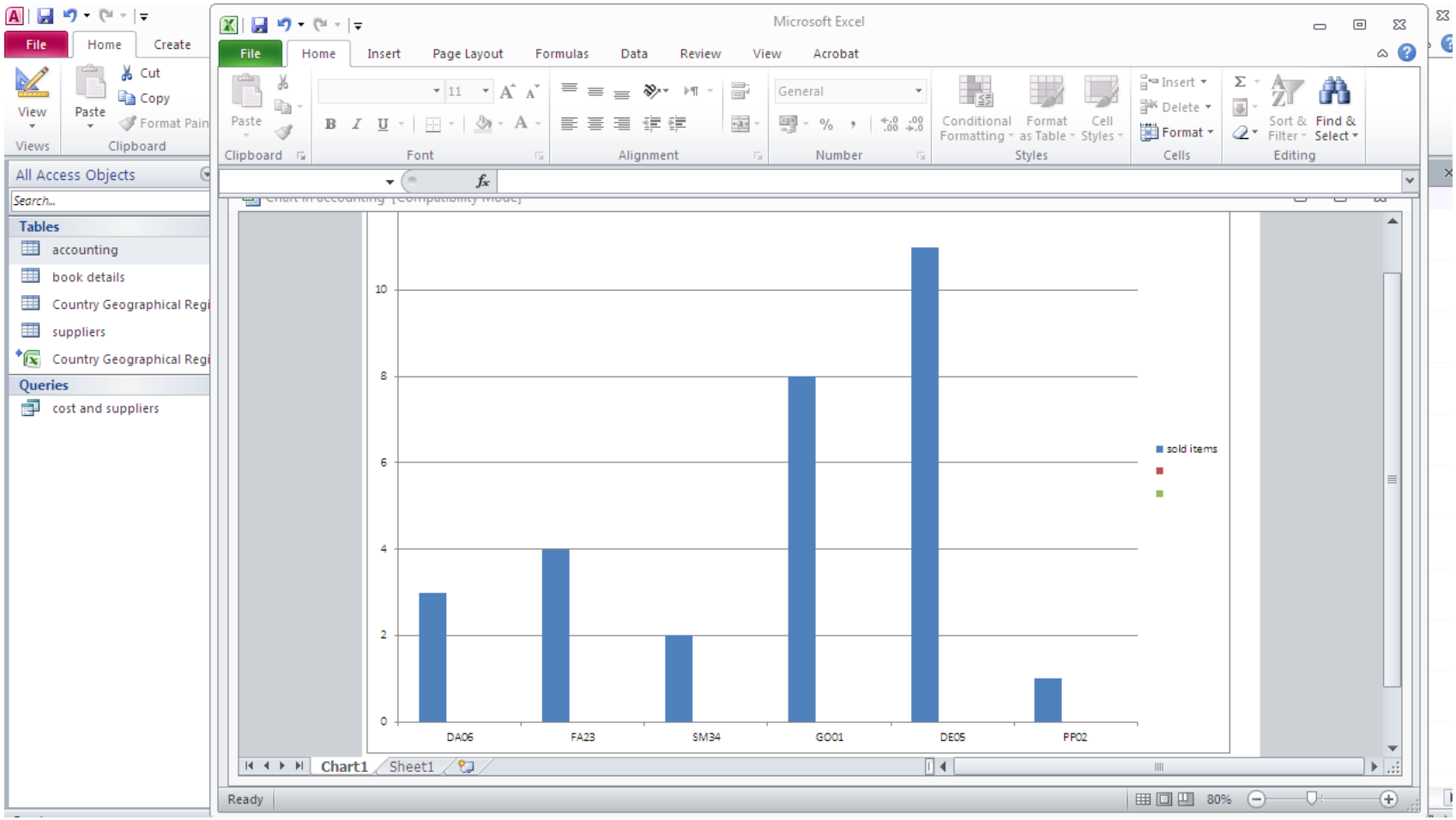
	A	B	C	D
1	book ID	Food	Gas	Motel
2	DA06	12	17	10
3	FA23	17	11	21
4	SM34	22	29	14
5	GO01	14	10	17
6	DE05	12	17	10
7	PP02	19	15	20
8	MA09			
9	OR01			
10	IT37			
11				


accounting
book ID
book title
purchased items
on hand
sold items
cost
selling p
DA06
design and analysis of experiments
8
5
60
FA23
financial accounting
8
50
SM34
statistical modeling
7
80
GO01
the goal
10
2
90
DE05
Design of experiments
20
10
PP02
Production planning and control
5
15
MA09
Management Accounting
6
60
OR01
Operations Research
9
40
IT37
Information thechnology and innovation
12
10
200
23
Sort Smallest to Largest
Sort Largest to Smallest
Copy
Paste
Field Width
Hide Fields
Unhide Fields
Freeze Fields
Unfreeze All Fields
Find...
Insert Field
Modify Lookups
Modify Expression
Rename Field
Delete Field

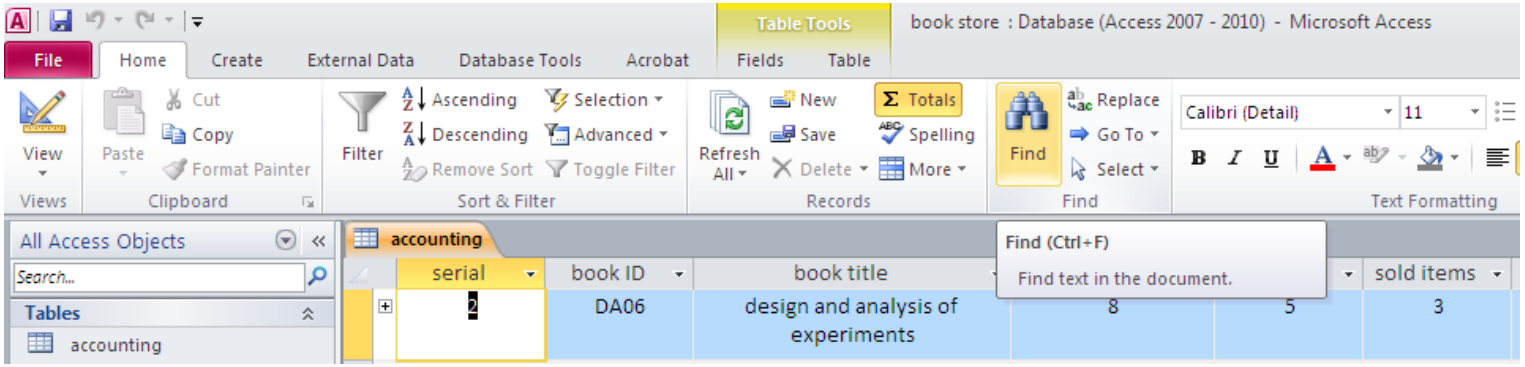


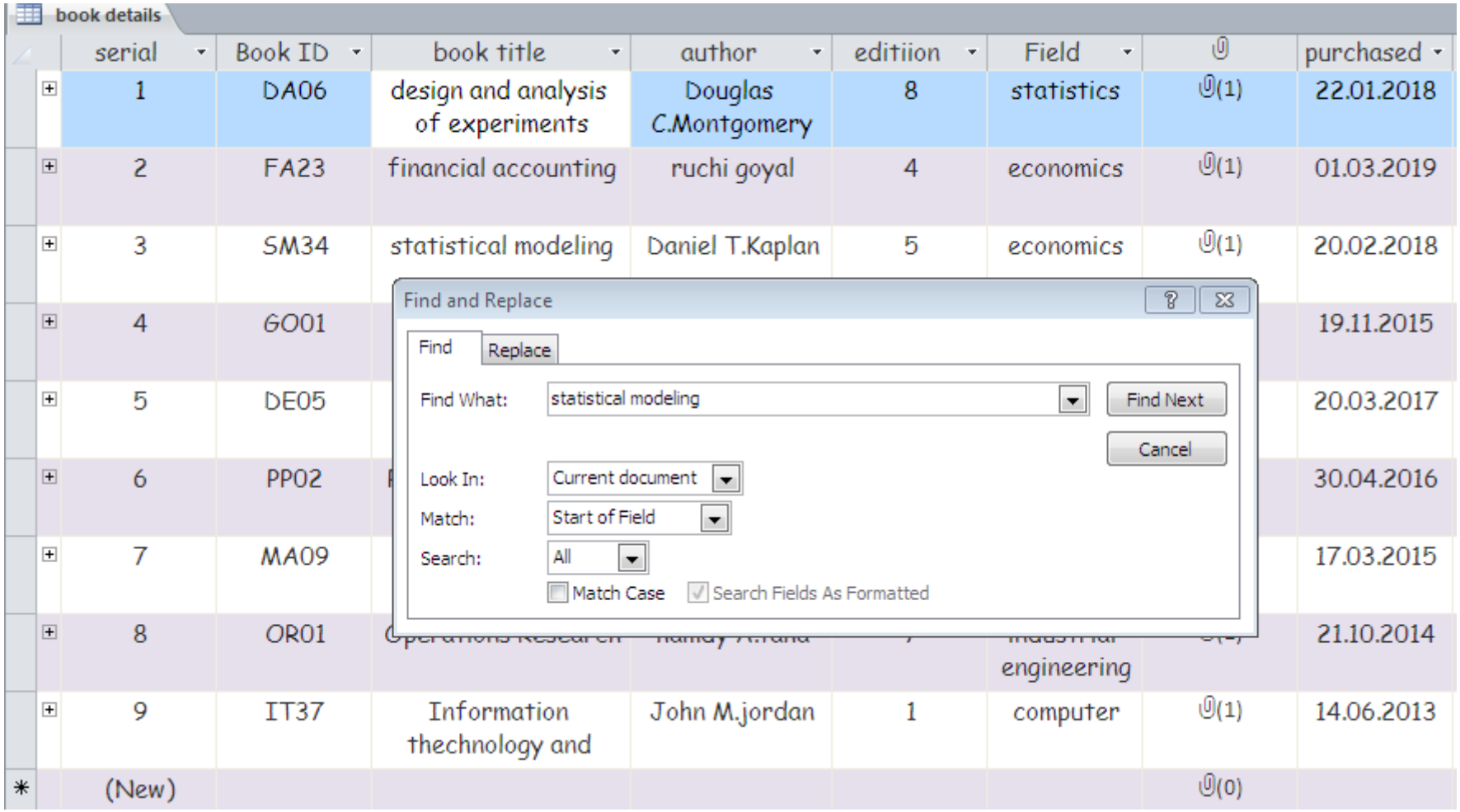
	A	B	C	D
1	book ID	sold items		
2	DA06	3		
3	FA23	4		
4	SM34	2		
5	GO01	8		
6	DE05	11		
7	PP02	1		
8	MA09	3		
9	OR01	5		
10	IT37	10		
11				

The chart is automatically updated after you modify the data



FIND AND REPLACE




book details
serial
Book ID
book title
author
editiion
Field
purchased
1
DA06
design and analysis of experiments
Douglas C.Montgomery
8
statistics
22.01.2018
2
FA23
financial accounting
ruchi goyal
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economics
01.03.2019
3
SM34
statistical modeling
Daniel T.Kaplan
5
economics
20.02.2018
4
GO01
19.11.2015
5
DE05
20.03.2017
6
PP02
30.04.2016
7
MA09
17.03.2015
8
OR01
21.10.2014
engineering
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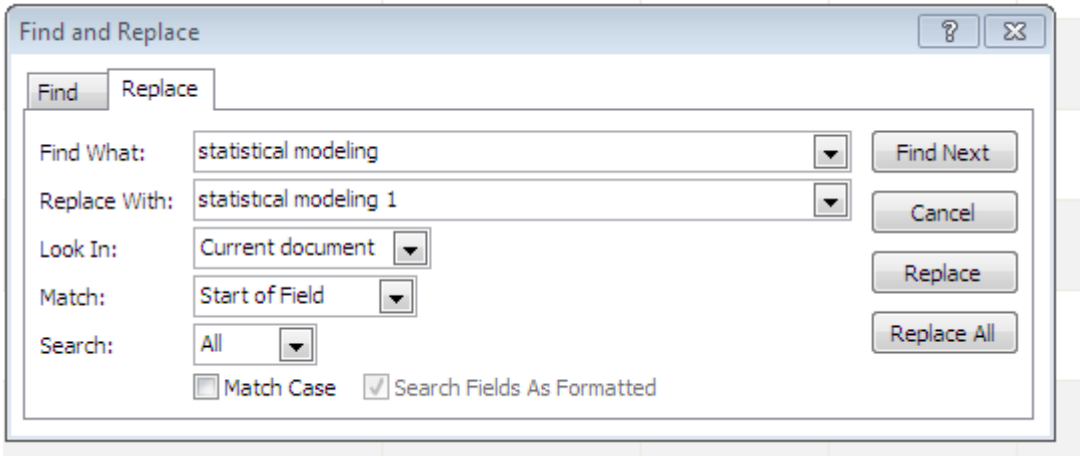
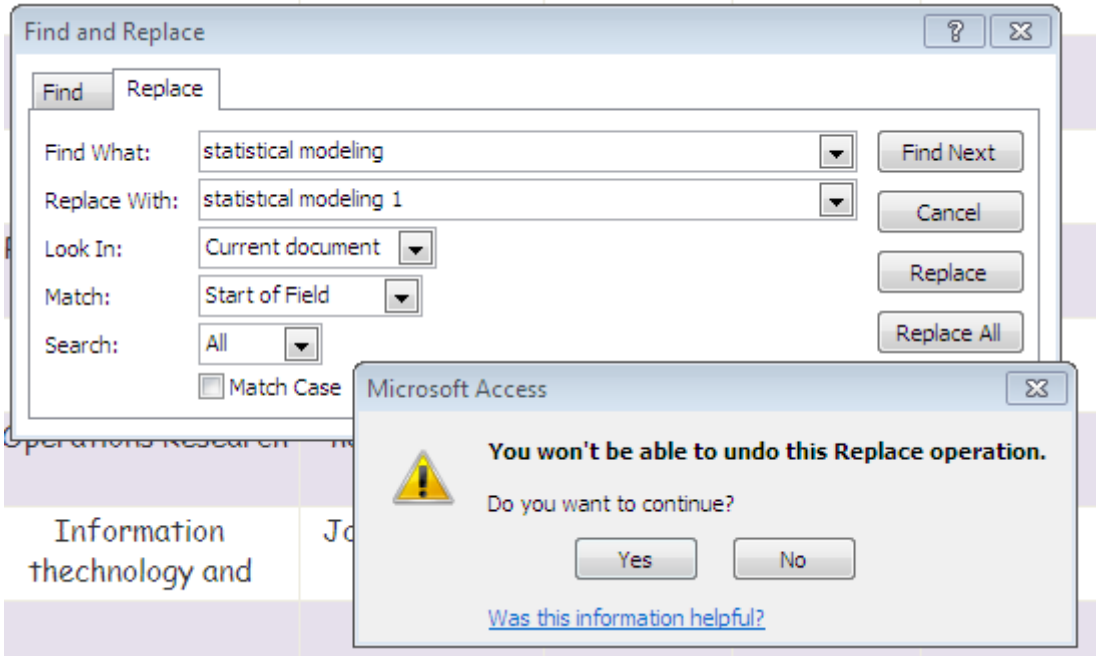
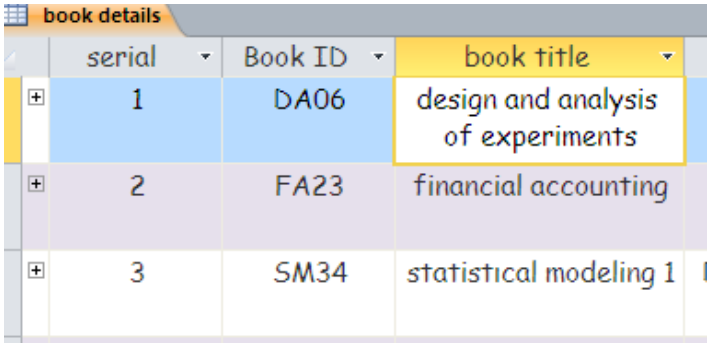
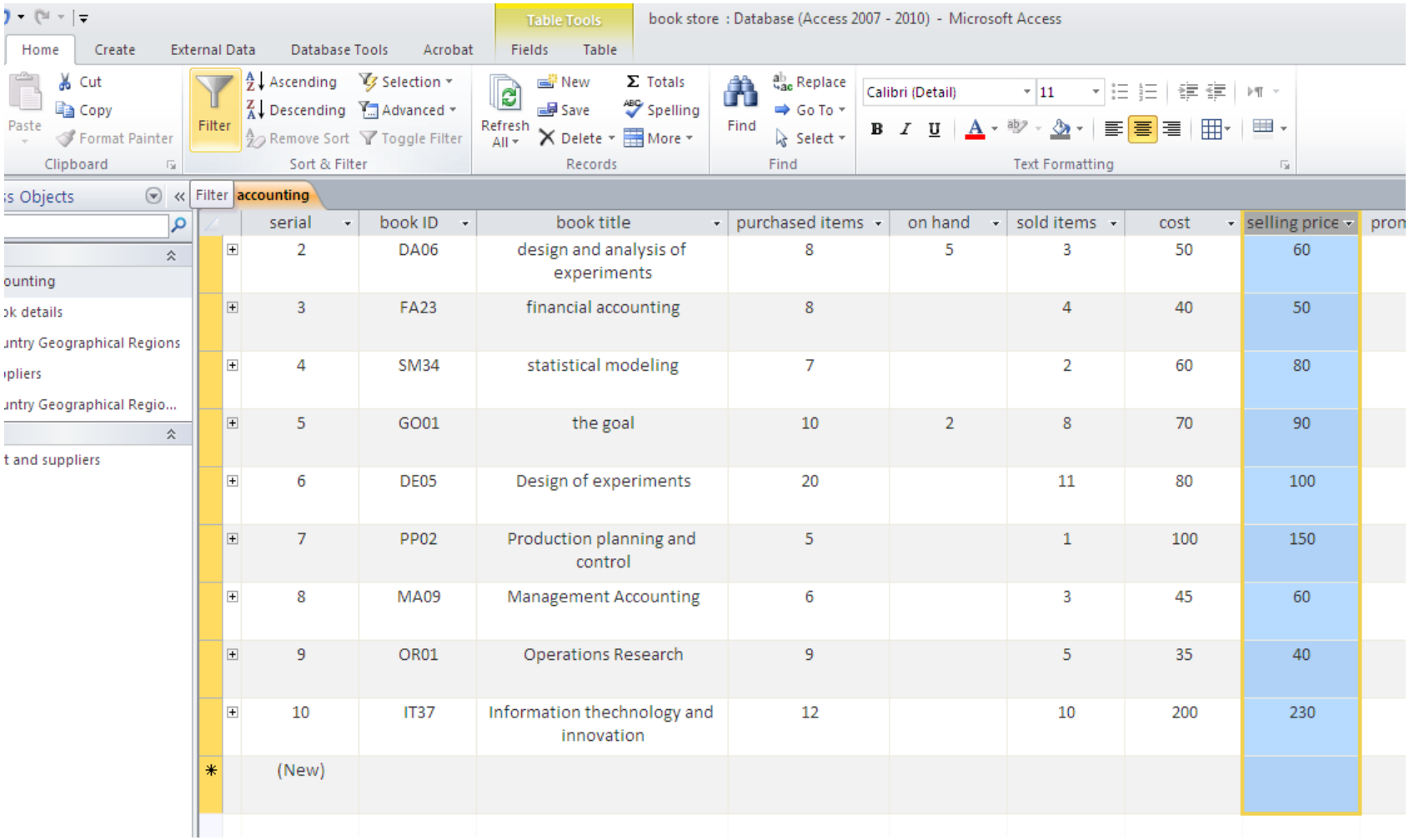
IT37
Information thechnology and
John M.jordan
1
computer
14.06.2013
(New)
Find and Replace
Find
Replace
Find What:
statistical modeling
Find Next
Cancel
Look In:
Current document
Match:
Start of Field
Search:
All
Match Case
Search Fields As Formatted


Find and Replace
Find
Replace
Find What:
statistical modeling
Replace With:
statistical modeling 1
Look In:
Current document
Match:
Start of Field
Search:
All
Match Case
Search Fields As Formatted
Find Next
Cancel
Replace
Replace All

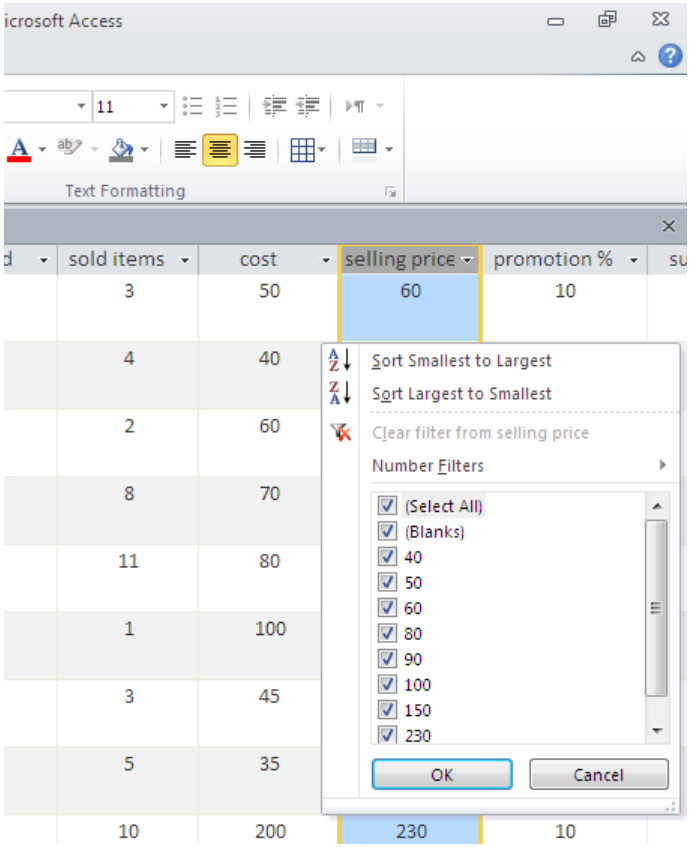

Find and Replace
Find
Replace
Find What:
statistical modeling
Replace With:
statistical modeling 1
Look In:
Current document
Match:
Start of Field
Search:
All
Match Case
Find Next
Cancel
Replace
Replace All
Microsoft Access
You won't be able to undo this Replace operation.
Do you want to continue?
Yes
No
Was this information helpful?
Information
thechnology and


book details
serial
Book ID
book title
1
DA06
design and analysis of experiments
2
FA23
financial accounting
3
SM34
statistical modeling 1

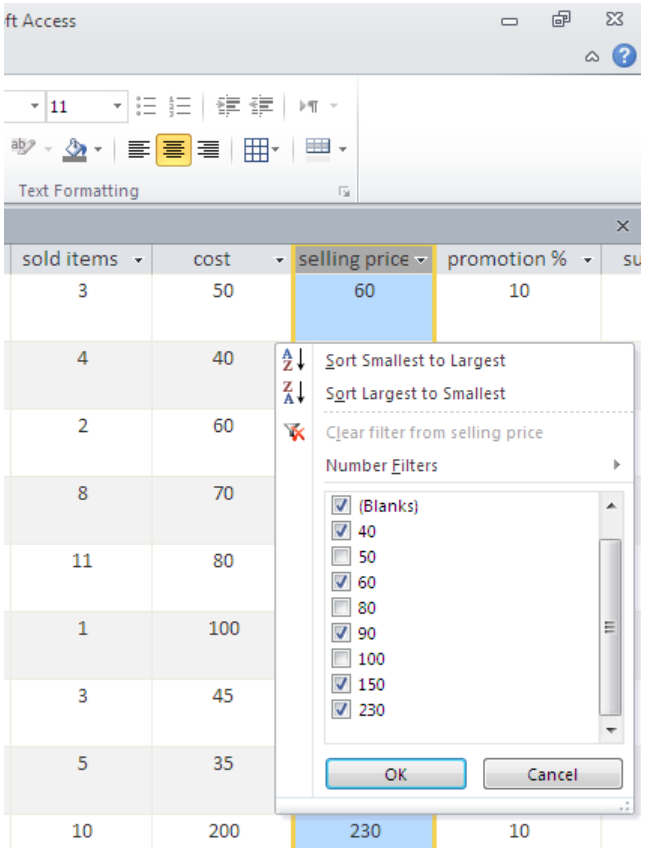
FILTER



serial	book ID	book title	purchased items	on hand	sold items	cost	selling price
2	DA06	design and analysis of experiments	8	5	3	50	60
3	FA23	financial accounting	8		4	40	50
4	SM34	statistical modeling	7		2	60	80
5	GO01	the goal	10	2	8	70	90
6	DE05	Design of experiments	20		11	80	100
7	PP02	Production planning and control	5		1	100	150
8	MA09	Management Accounting	6		3	45	60
9	OR01	Operations Research	9		5	35	40
10	IT37	Information thechnology and innovation	12		10	200	230
(New)							



Select the values that you desire to keep

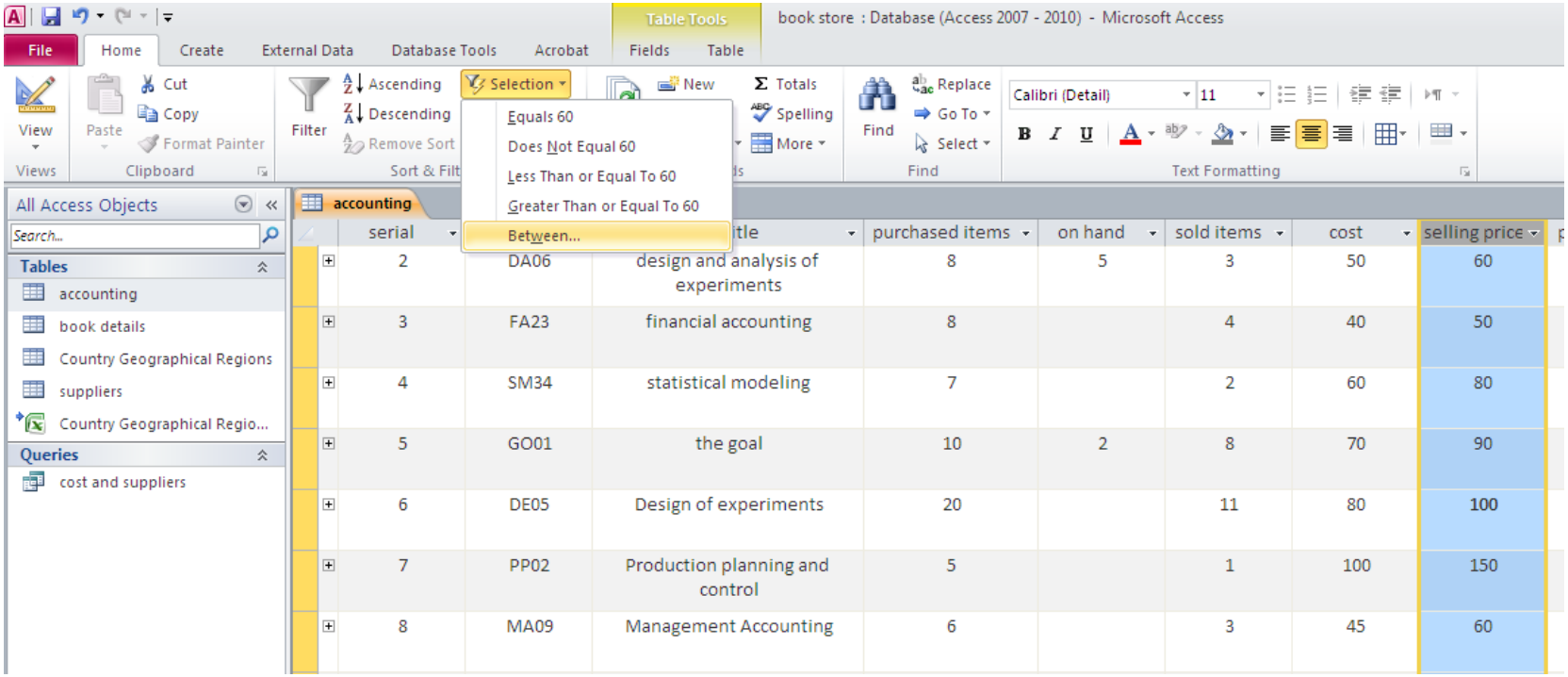


Only the selected values are kept

accounting

serial	book ID	book title	purchased items	on hand	sold items	cost	selling price
5	GO01	the goal	10	2	8	70	90
7	PP02	Production planning and control	5		1	100	150
8	MA09	Management Accounting	6		3	45	60
9	OR01	Operations Research	9		5	35	40
10	IT37	Information thechnology and innovation	12		10	200	230
2	DA06	design and analysis of experiments	8	5	3	50	60
(New)							

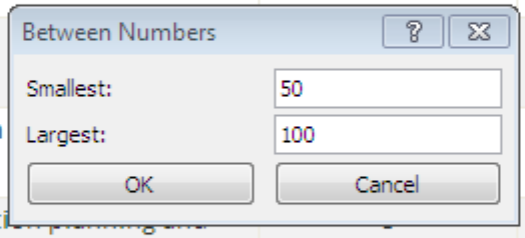
SELECT
(ANOTHER WAY TO FILTER)



serial		itle	purchased items	on hand	sold items	cost	selling price
2	DA06	design and analysis of experiments	8	5	3	50	60
3	FA23	financial accounting	8		4	40	50
4	SM34	statistical modeling	7		2	60	80
5	GO01	the goal	10	2	8	70	90
6	DE05	Design of experiments	20		11	80	100
7	PP02	Production planning and control	5		1	100	150
8	MA09	Management Accounting	6		3	45	60

accounting

serial	book ID	book title	purchased items	on hand	sold items	cost
2	DA06	design and analysis of experiments	8	5	3	50
3	FA23	financial accounting	8		4	40
4	SM34	statistical modeling	7		2	60
5	GO01			2	8	70
6	DE05	Design			11	80
7	PP02	Producti… control			1	100
8	MA09	Management Accounting	6		3	45
9	OR01	Operations Research	9		5	35
10	IT37	Information thechnology and innovation	12		10	200



accounting

serial	book ID	book title	purchased items	on hand	sold items	cost
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6	DE05	Design of experiments	20		11	80
7	PP02	Production planning and control	5		1	100
4	SM34	statistical modeling	7		2	60
2	DA06	design and analysis of experiments	8	5	3	50
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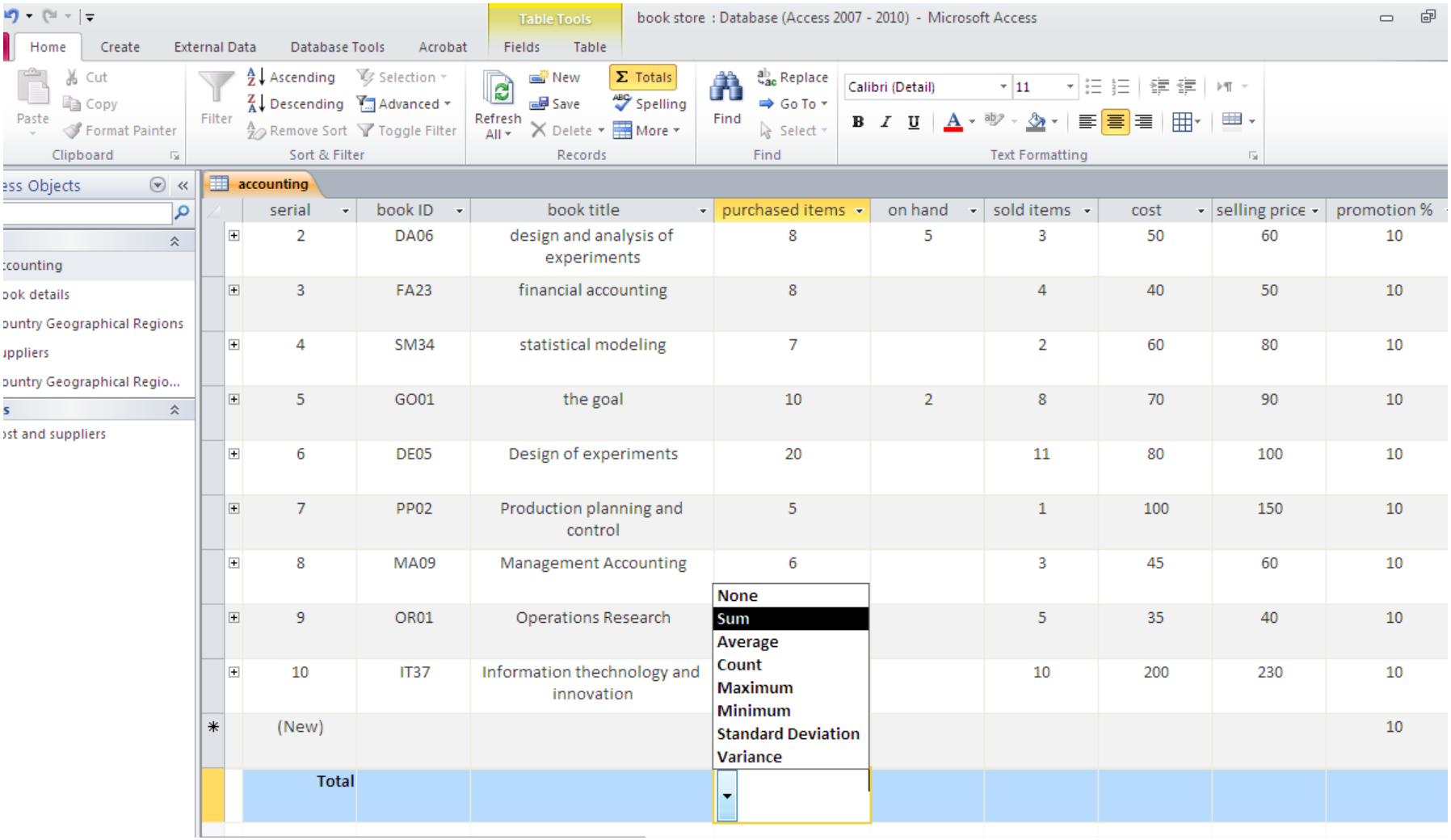
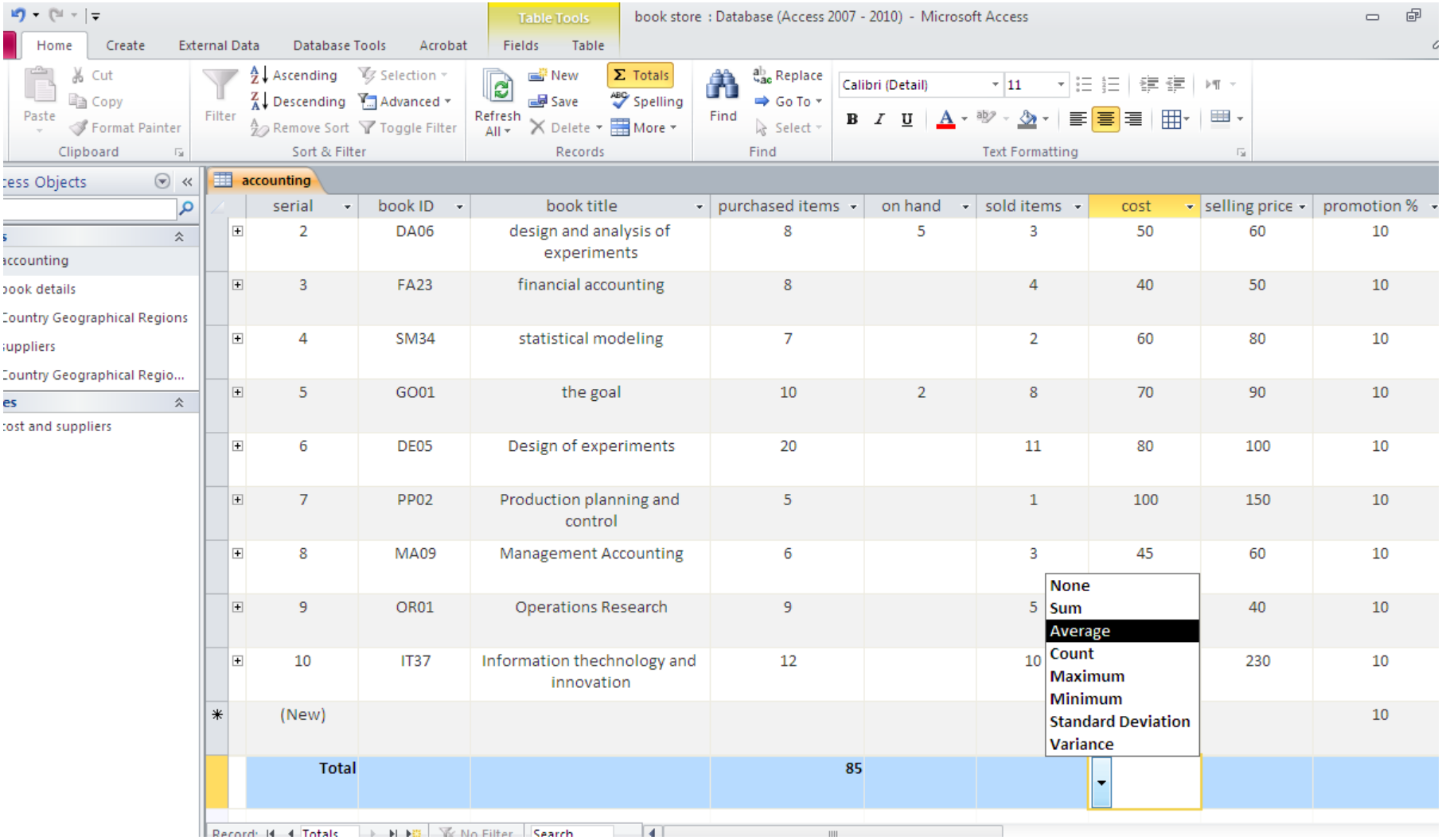
TOTALS : SUM , AVERAGE....

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3 FA23 financial accounting 8 4 40 50 10
4 SM34 statistical modeling 7 2 60 80 10
5 GO01 the goal 10 2 8 70 90 10
6 DE05 Design of experiments 20 11 80 100 10
7 PP02 Production planning and control 5 1 100 150 10
8 MA09 Management Accounting 6 3 45 60 10
9 OR01 Operations Research 9 5 40 10
10 IT37 Information thechnology and innovation 12 10 230 10
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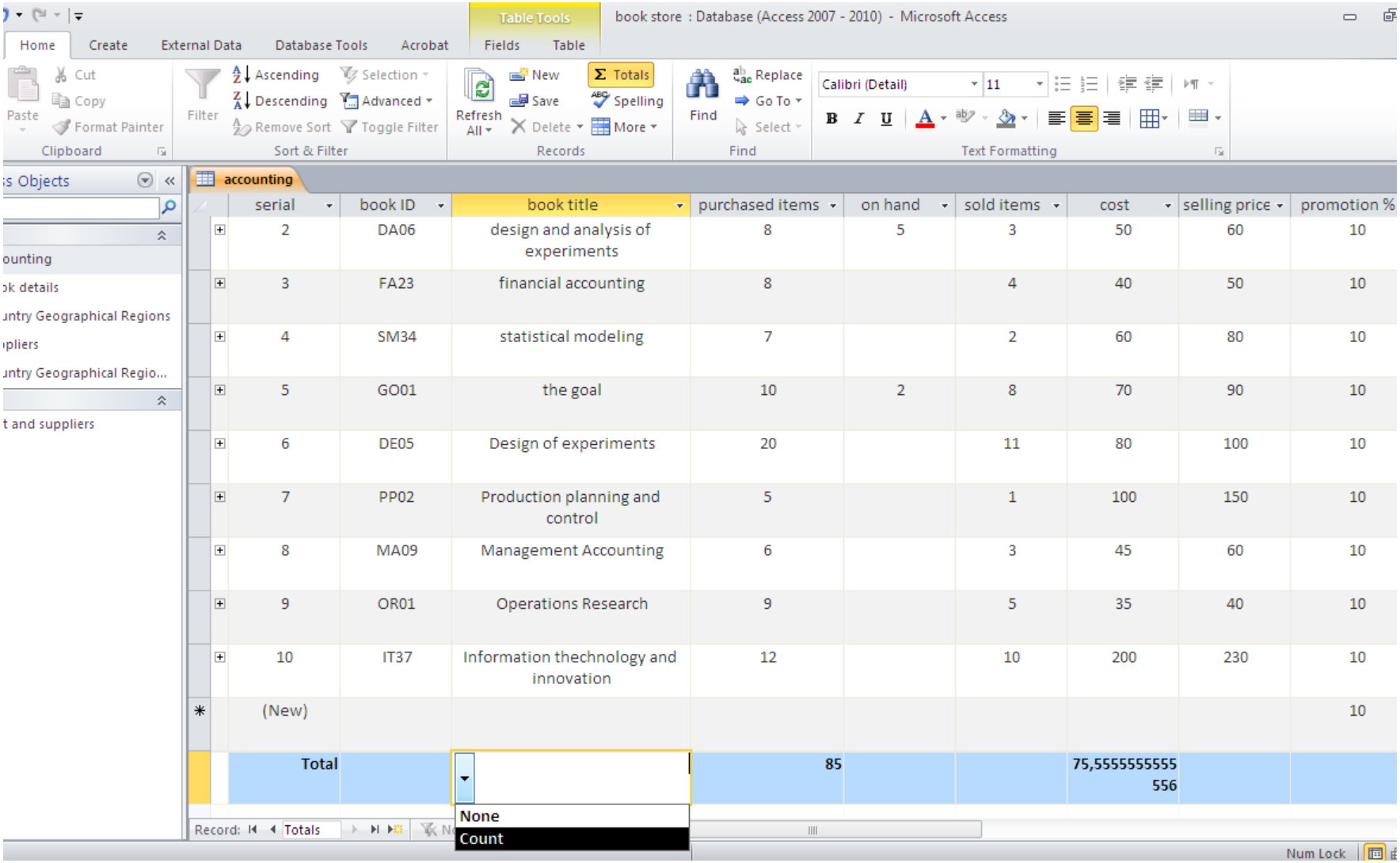
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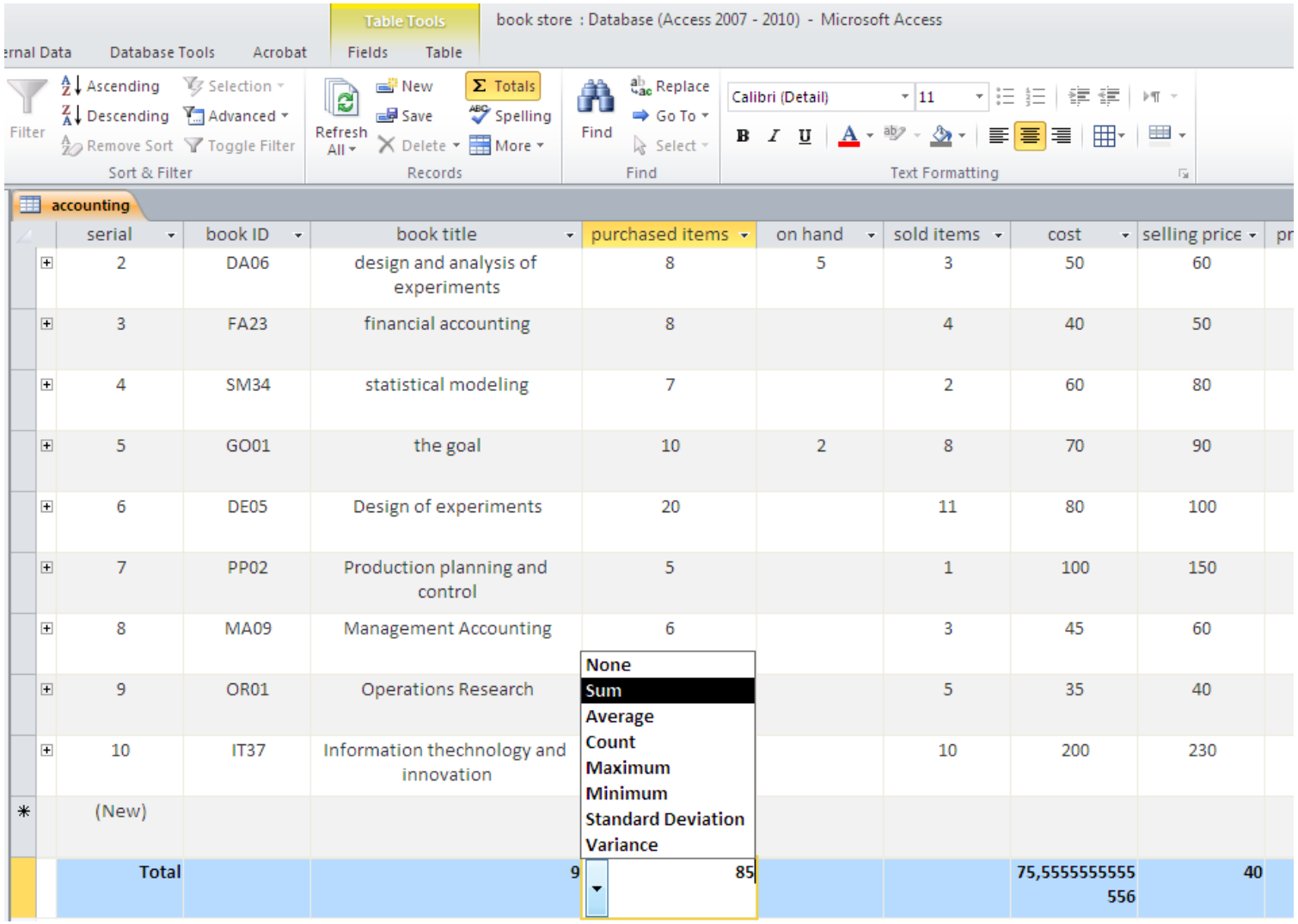
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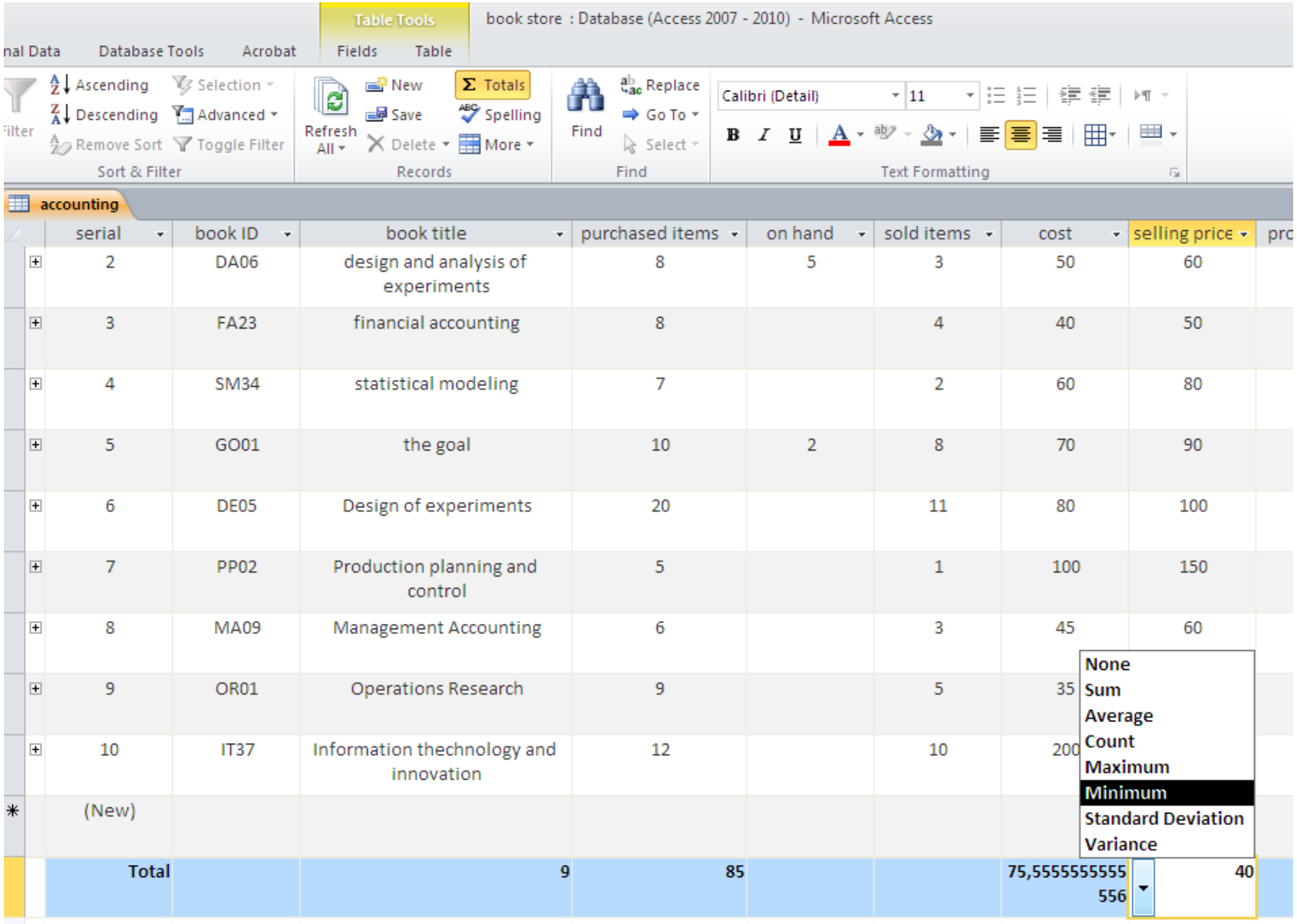
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Total 9 85 75,55555555556 40

Relationships

The power of a relational database lies in combining data across tables. To do that, you first need to establish relationships between your tables. Then, put Access to work to combine data in queries, forms, and reports.

Relationships between tables normally rely on the primary key in one of the tables. There are three types of relationships :

One-to-one

When each item in each table only appears once,it means that each record in the first table can have only one matching record in the second table, and each record in the second table can have only one matching record in the first table. When you do identify such a relationship, both tables must share a common field.
For example, eachemployee can have only one company car to use.
To represent a this relationship in your database design, take the primary key on each side of the relationship and add it as an additional field or fields to the table on both sides of the relationship.

One-to-many

When one item in one table can have a relationship to multiple items in another table.
For example, each purchase order can include multiple products.
Another example, A customer can place any number of orders. It follows that for any customer represented in the Customers table, there might be many orders represented in the Orders table. The relationship between the Customers table and the Orders table is a one-to-many relationship.
To represent a one-to-many relationship in your database design, take the primary key on the "one" side of the relationship and add it as an additional field or fields to the table on the "many" side of the relationship.

Many-to-many

When one or more items in one table can have a relationship to one or more items in another table.
For example, each order can have multiple products, and each product can appear on many orders.
Another example is the relationship between a Products table and an Orders table. A single order can include more than one product. On the other hand, a single product can appear on many orders. Therefore, for each record in the Orders table, there can be many records in the Products table. In addition, for each record in the Products table, there can be many records in the Orders table. This relationship is called a many-tomany relationship. Note that to detect existing many-to-many relationships between your tables, it is important that you consider both sides of the relationship.
To represent a many-to-many relationship, you must create a third table, often called a junction table, that breaks down the many-to-many relationship into two one-to-many relationships. You insert the primary key from each of the two tables into the third table. As a result, the third table records each occurrence, or instance, of the relationship.
For example, the Orders table and the Products table have a many-to-many relationship that is defined by creating two one-to-many relationships to the Order Details table. One order can have many products, and each product can appear on many orders.

Referential Integrity

Enforce Referential Integrity

when a record is removed from one table , it will be removed from the related table.

To prevent invalid(missing/orphans) data and to keep references in sync across table relationships, by keeping deleted data from getting out of synch.

For example, suppose you have a one-to-one relationship between the Employees and Employee Benefits tables. If an employee leaves the company and you remove them from your Employees table, the related employee record in the Employee Benefits table is removed,too

Cascade Update Related Fields

When a data is updated in a field , it will be updated in all the other related tables . (like find and replace automatically)

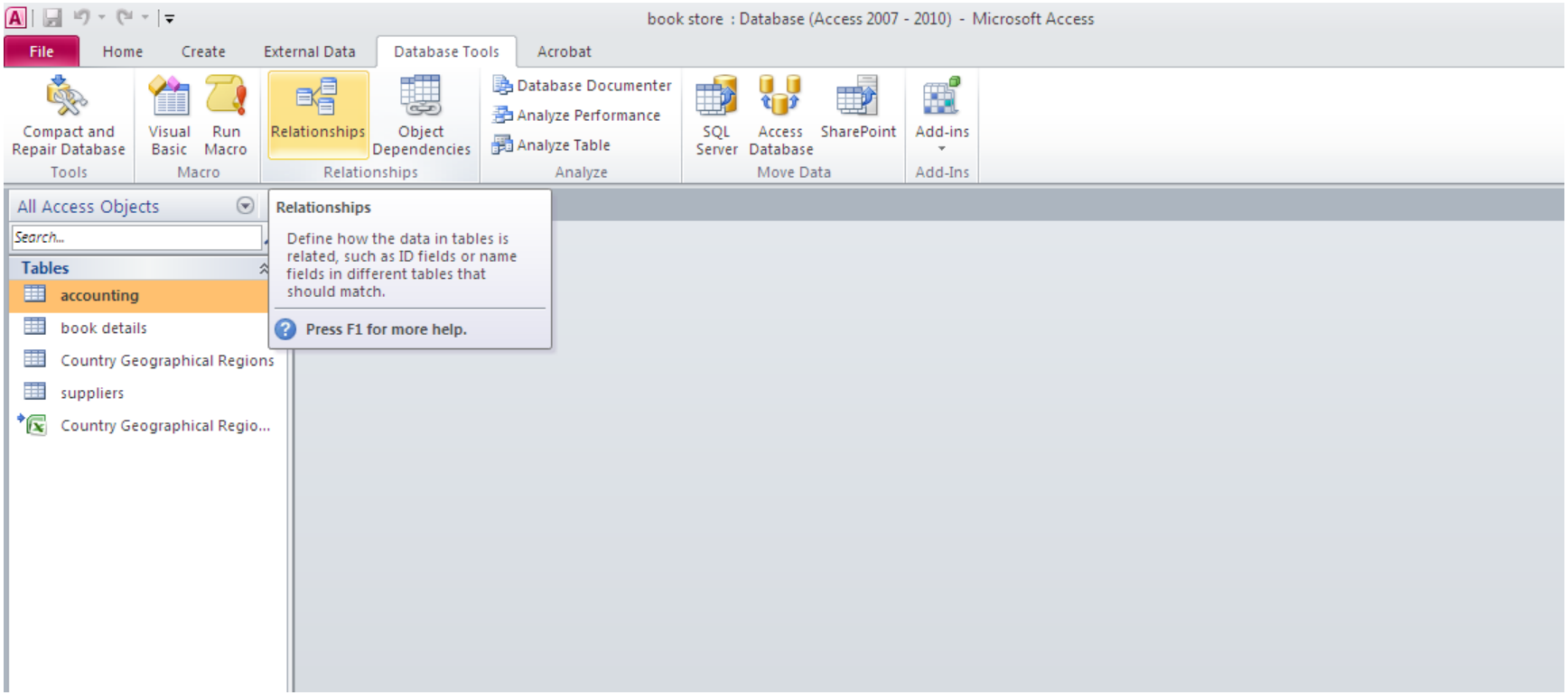
To make sure that data in related fields is updated in all the related tables, select this.

For example, suppose you simply want to change the ID of a shipper. Setting this option ensures that the Shipper ID is updated—not just in the Shipper table but also in any other tables connected to it that also include that Shipper ID, such as the Orders table.

Cascade Delete Related Records

When you delete a record from one table , All related records in all the database will be deleted.

The decision to select this depends on whether you need to retain records in some tables even though they might be deleted from other tables.
For example, suppose you delete a shipper. If this option is selected, Access deletes all records in all tables that reference that Shipper ID, including all orders (in the Orders table) shipped by that shipper. You only select this option if you are sure you want your order history deleted.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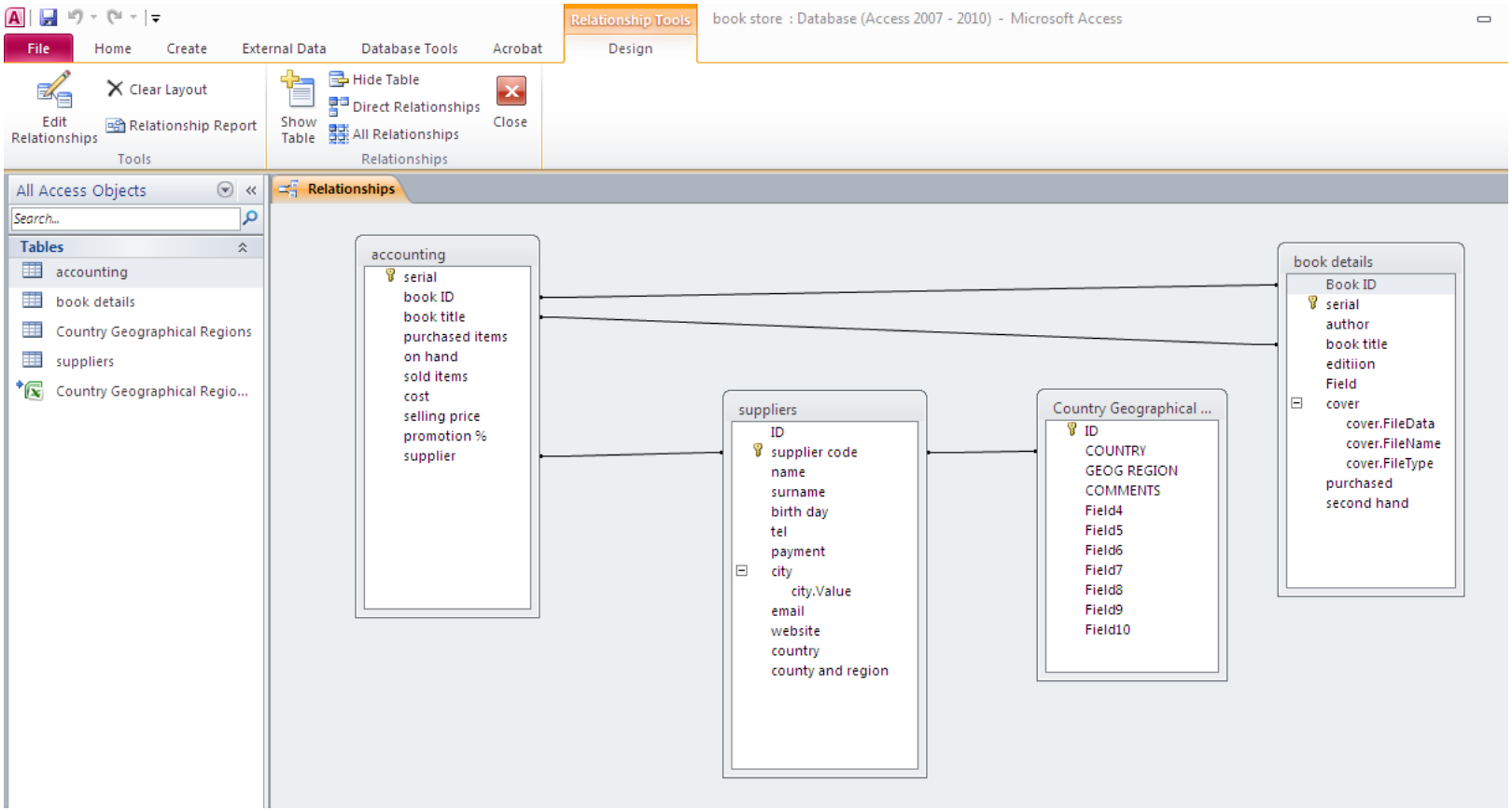
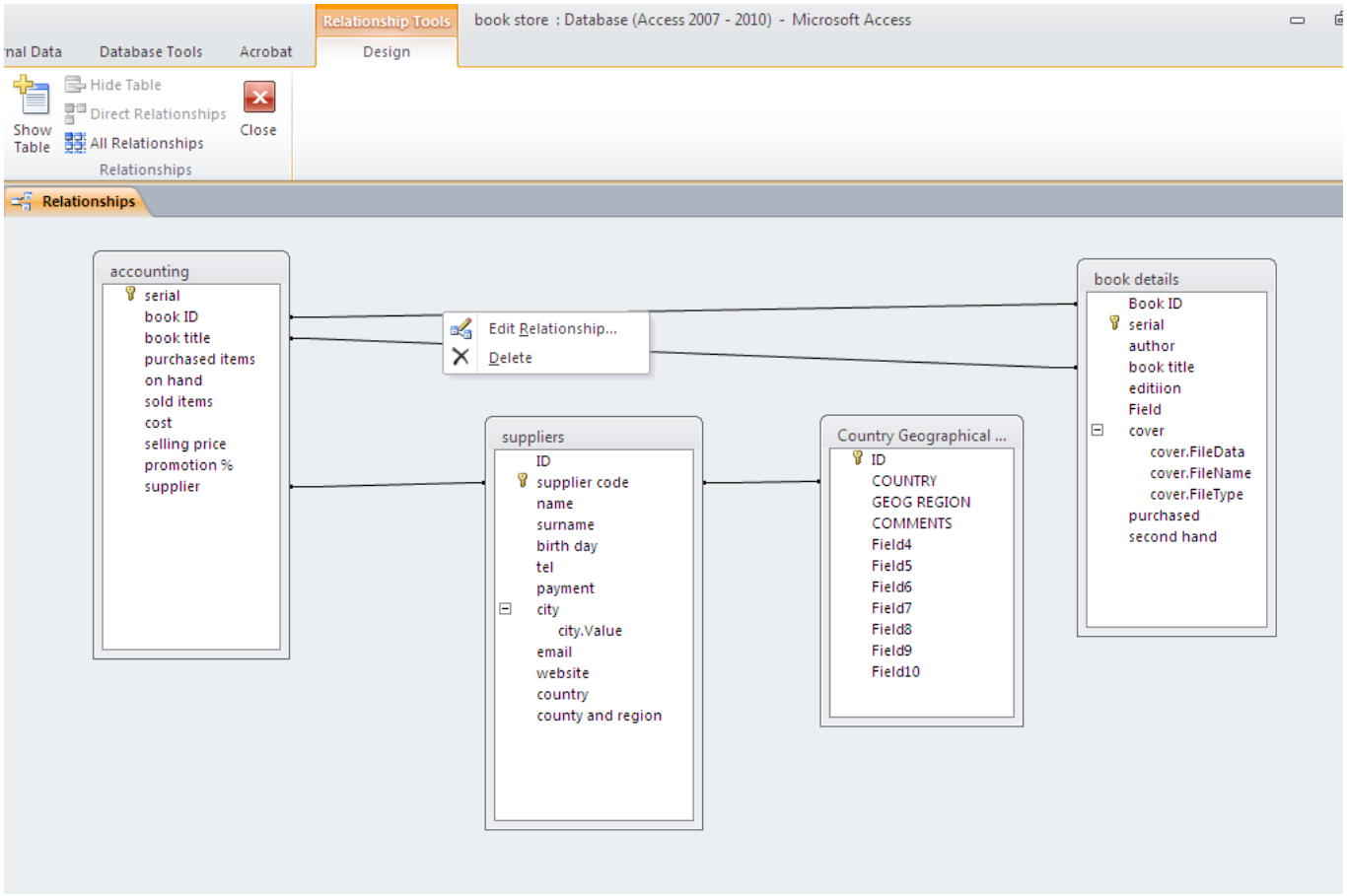
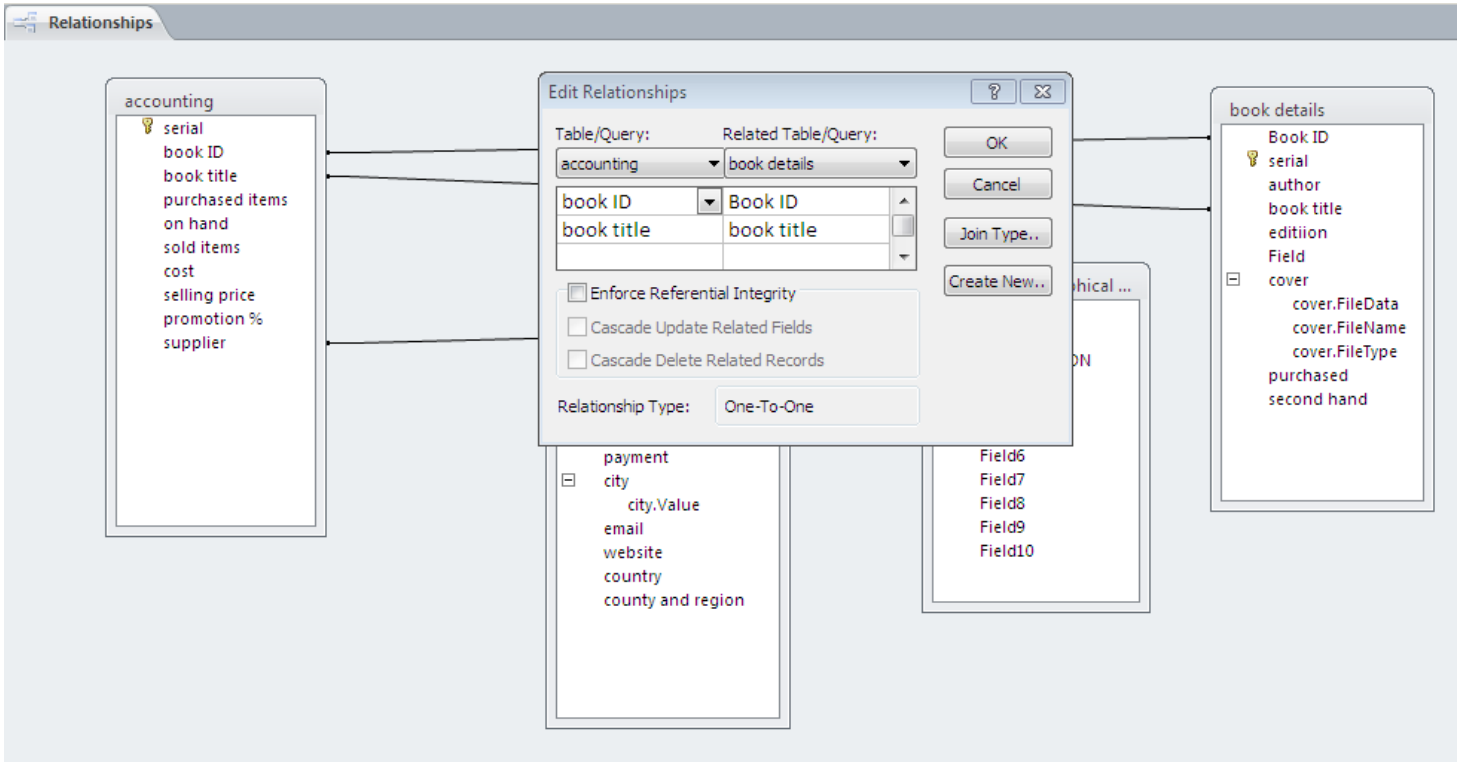
Relationships
Define how the data in tables is related, such as ID fields or name fields in different tables that should match.
Press F1 for more help.

The relationships created by lookup appear



Right click on the relation to delete or edit

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Enforce Referential Integrity
Cascade Update Related Fields
Cascade Delete Related Records
Relationship Type:
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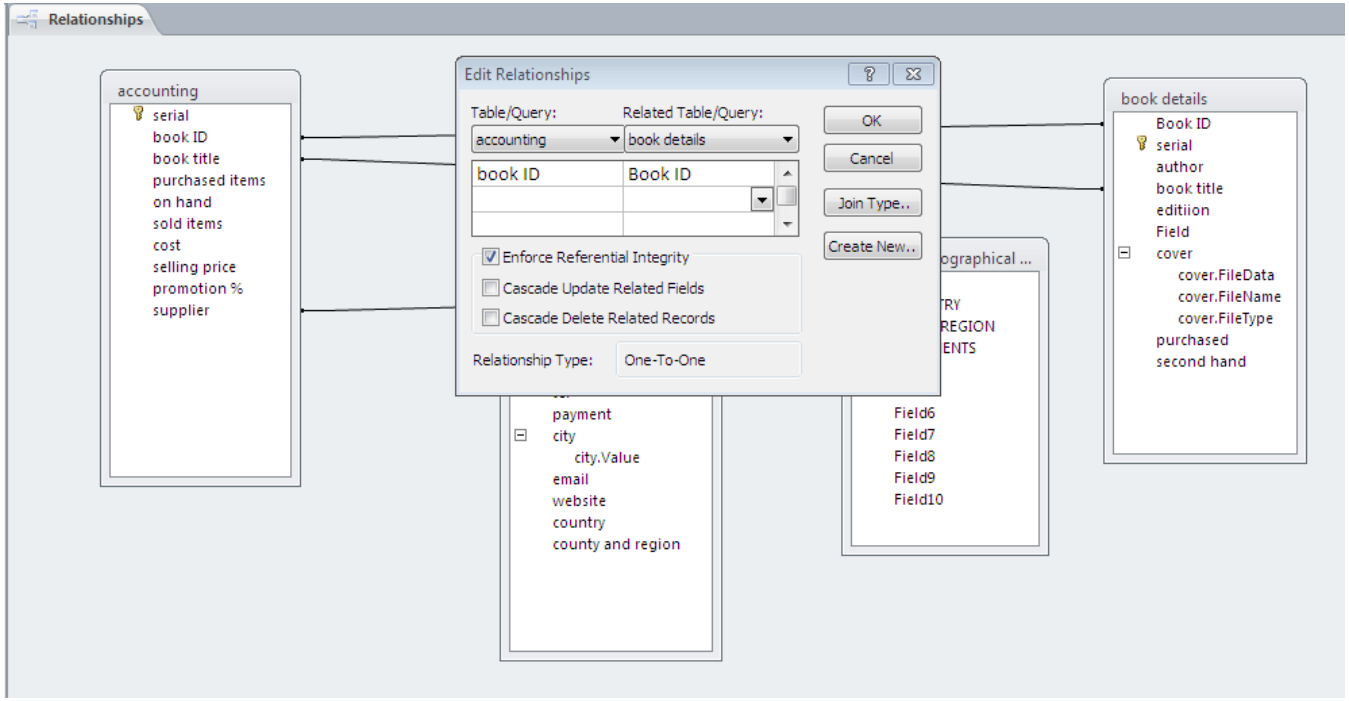
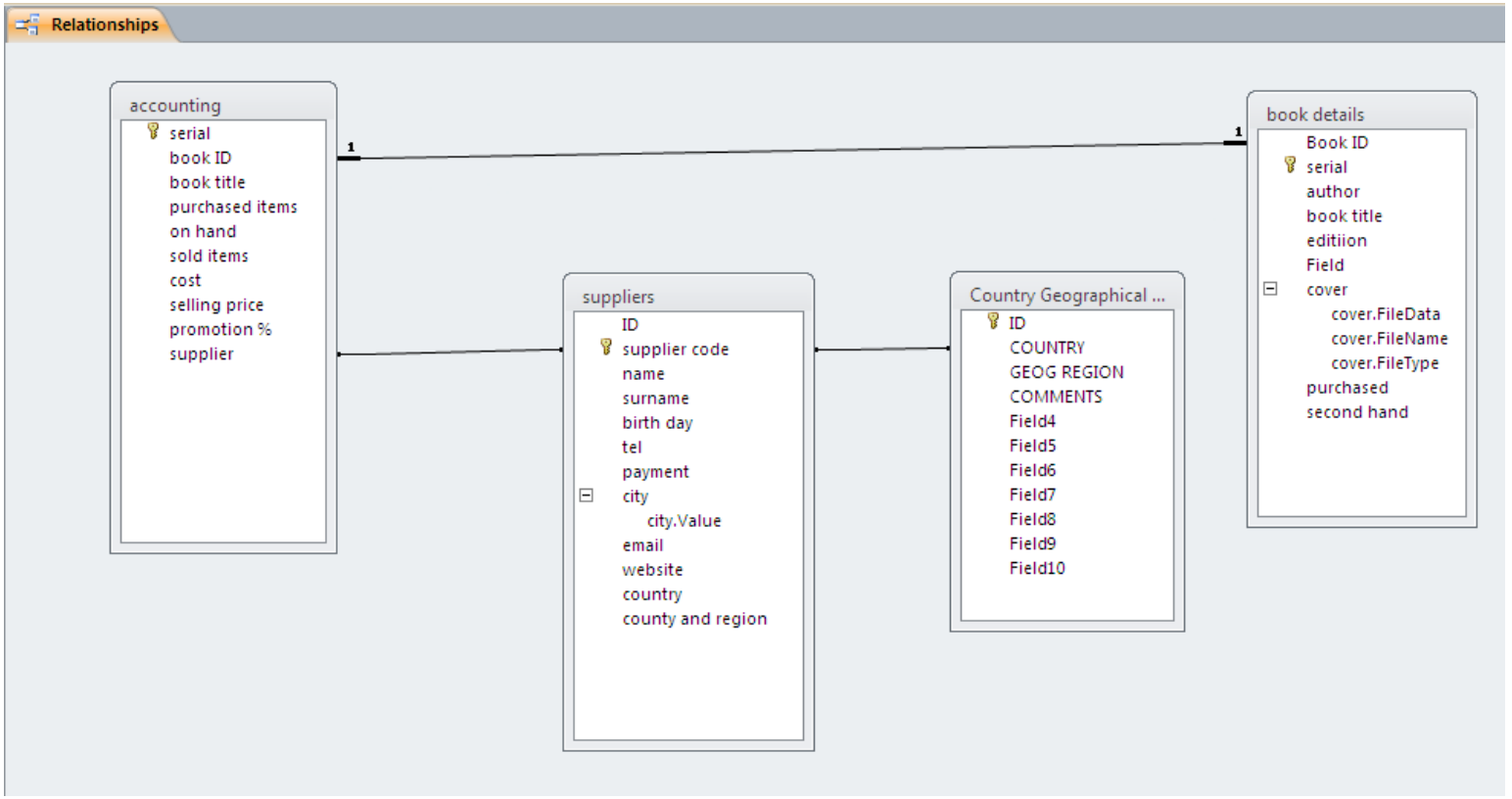
Edit the relationship between accounting and book details ,each record(book) in accounting exists in book details : it is a relation one to one

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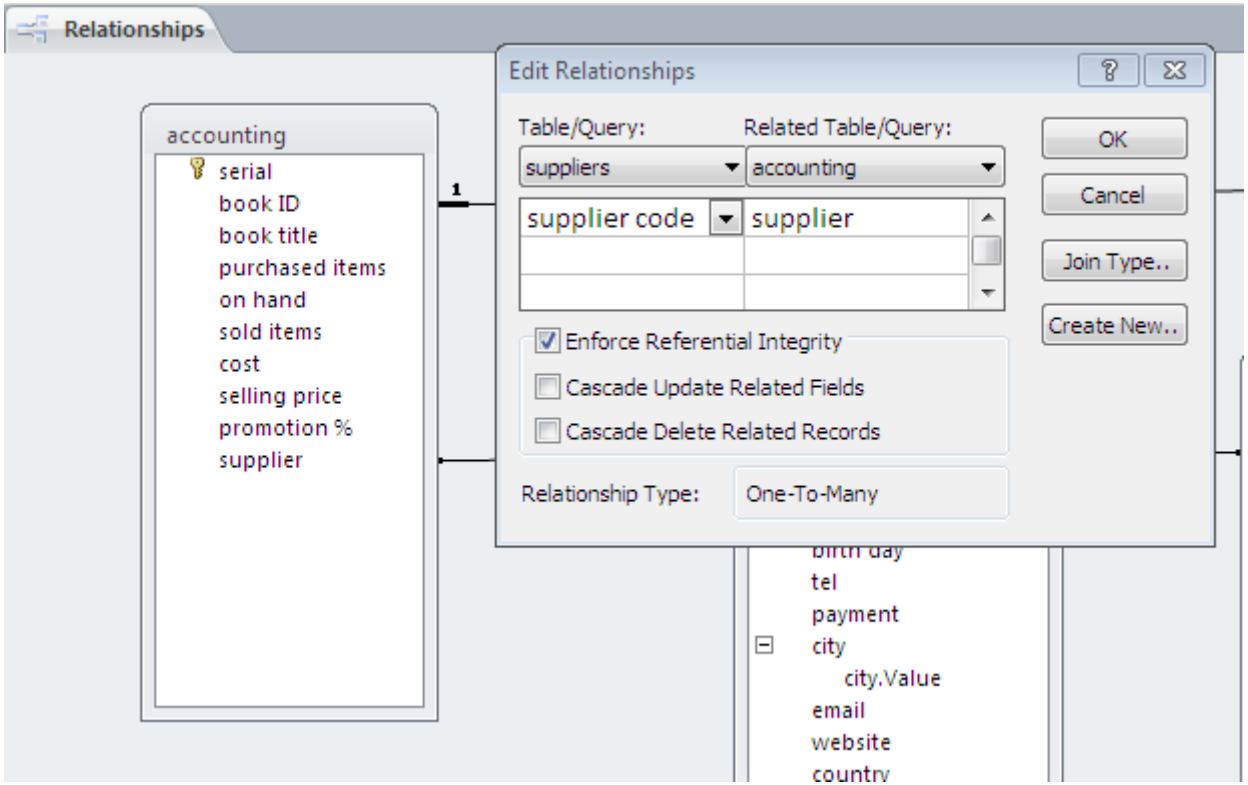
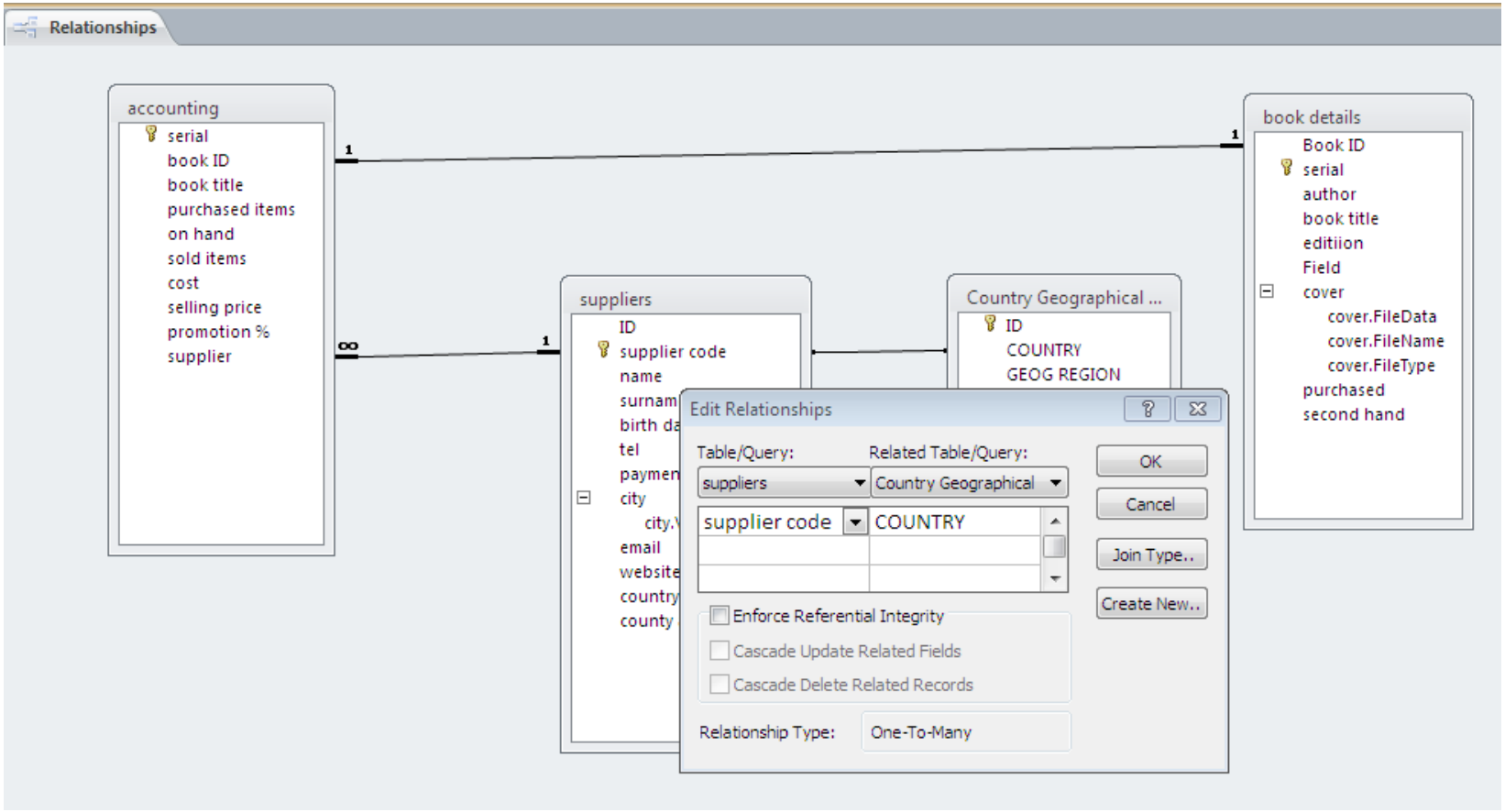
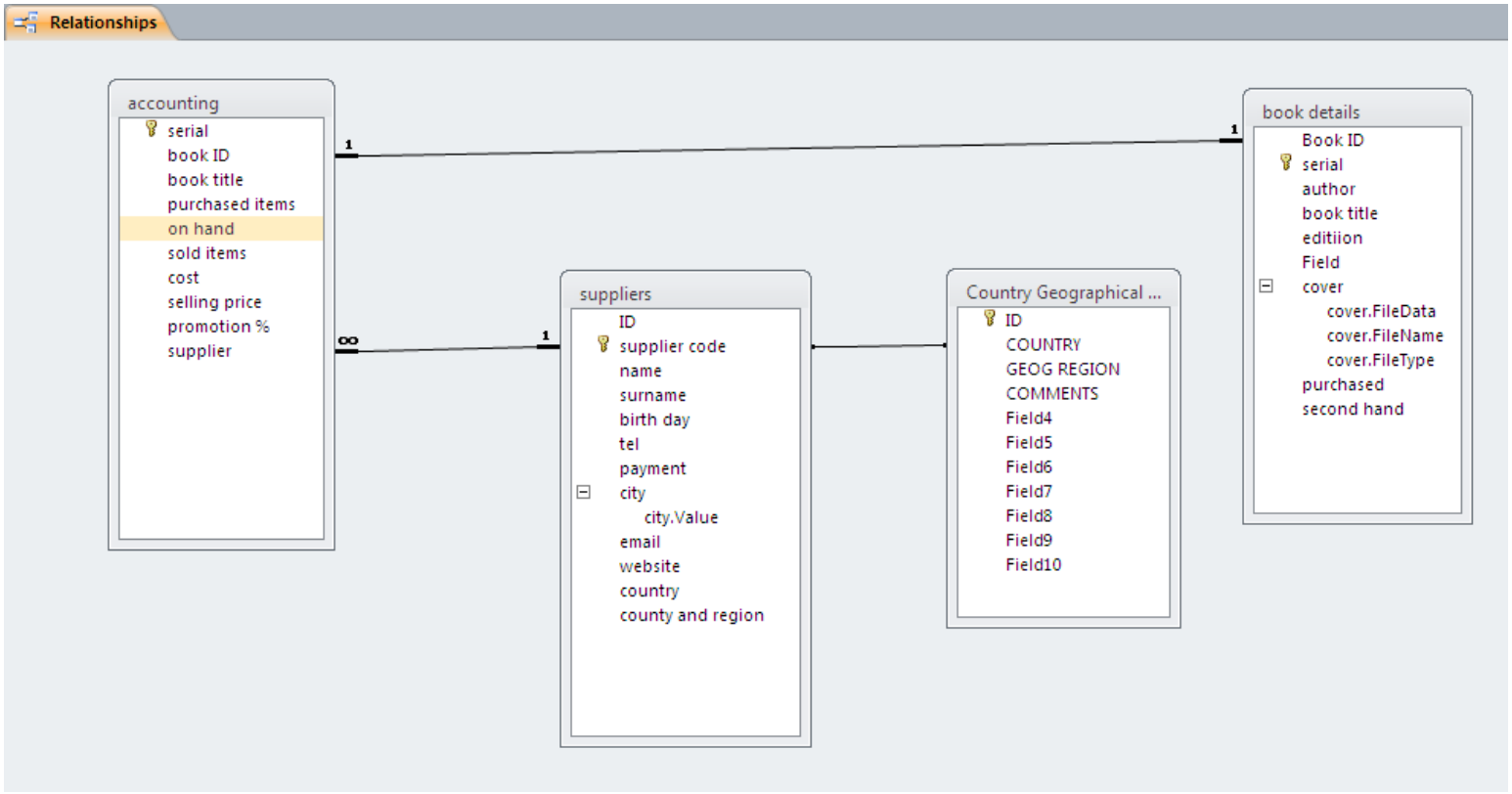
Each book has one supplier , but one supplier can supply many books (in our example) : one to many relationship



Each supplier is located in one country ,many supplier may be in the same country: one to many relationship

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Now ; Your tables are created and designed ,The relationships between your tables are managed , you can benefit from other access tools such as queries, forms and reports.