# Data Modelling

#### Task 1

A book printer or book shop needs a basic data model to hold their database of Titles, Authors and Publishers. They have given you no further information so it is up to you to come up with a design to hold this data.

#### Task 2

#### Using your data model build a database to hold the following book information

	title	author	publisher	price
1	You Can Combat Computer Stress!	Marjorie Green	New Moon Books	2.99
2	Straight Talk About Computers	Dean Straight	Algodata Infosystems	19.99
3	Silicon Valley Gastronomic Treats	Innes del Castillo	Binnet & Hardley	19.99
4	But Is It User Friendly?	Cheryl Carson	Algodata Infosystems	22.95
5	Net Etiquette	Charlene Locksley	Algodata Infosystems	NULL
6	Life Without Fear	Albert Ringer	New Moon Books	7.00
7	Prolonged Data Deprivation: Four Case Studies	Johnson White	New Moon Books	19.99
8	Emotional Security: A New Algorithm	Charlene Locksley	New Moon Books	7.99
9	Onions, Leeks, and Garlic: Cooking Secrets of t	Sylvia Panteley	Binnet & Hardley	20.95
10	Fifty Years in Buckingham Palace Kitchens	Reginald Blotchet-Halls	Binnet & Hardley	11.95

Insert this data into your database and write the sql to generate this result set so the customer can see you have done what they ask.

#### Task 3

# The customer has now come back with some additional books they need to include in this database. Are you able to insert the books listed?

	title	author	publisher	price
1	The Busy Executive's Database Guide	Marjorie Green	Algodata Infosystems	19.99
2	The Busy Executive's Database Guide	Abraham Bennet	Algodata Infosystems	19.99
3	Cooking with Computers: Surreptitious Balance Sheets	Michael O'Leary	Algodata Infosystems	11.9
4	Cooking with Computers: Surreptitious Balance Sheets	Stearns MacFeather	Algodata Infosystems	11.9
5	The Gourmet Microwave	Michel DeFrance	Binnet & Hardley	2.99
6	The Gourmet Microwave	Anne Ringer	Binnet & Hardley	2.99
7	Secrets of Silicon Valley	Ann Dull	Algodata Infosystems	20.0
8	Secrets of Silicon Valley	Sheryl Hunter	Algodata Infosystems	20.0
9	Computer Phobic AND Non-Phobic Individuals: Beha	Stearns MacFeather	Binnet & Hardley	21.5
10	Computer Phobic AND Non-Phobic Individuals: Beha	Livia Karsen	Binnet & Hardley	21.5
11	Is Anger the Enemy?	Anne Ringer	New Moon Books	10.9
12	Is Anger the Enemy?	Albert Ringer	New Moon Books	10.9
13	Sushi, Anyone?	Michael O'Leary	Binnet & Hardley	14.9
14	Sushi, Anyone?	Burt Gringlesby	Binnet & Hardley	14.9
15	Sushi, Anyone?	Akiko Yokomoto	Binnet & Hardley	14.9

### Another way of looking at these books is as follows

	title	authors	publisher	price
1	Computer Phobic AND Non-Phobic Individuals: Beha	Stearns MacFeather, Livia Karsen	Binnet & Hardley	21.59
2	Cooking with Computers: Surreptitious Balance Sheets	Michael O'Leary, Stearns MacFeather	Algodata Infosystems	11.95
3	Is Anger the Enemy?	Anne Ringer, Albert Ringer	New Moon Books	10.95
4	Secrets of Silicon Valley	Ann Dull, Sheryl Hunter	Algodata Infosystems	20.00
5	Sushi, Anyone?	Michael O'Leary, Burt Gringlesby, Akiko Yokomoto	Binnet & Hardley	14.99
6	The Busy Executive's Database Guide	Marjorie Green, Abraham Bennet	Algodata Infosystems	19.99
7	The Gourmet Microwave	Michel DeFrance, Anne Ringer	Binnet & Hardley	2.99

## Task 4

The customer has now come back with some additional information the database needs to hold, . Are you able to modify your database to include this information?

	title	type	author	auth city	publisher	pub city	price	date published
1	The Busy Executive's Database Guide	business	Marjorie Green	Oakland	Algodata Infosystems	Berkeley	19.99	12/06/1991
2	The Busy Executive's Database Guide	business	Abraham Bennet	Berkeley	Algodata Infosystems	Berkeley	19.99	12/06/1991
3	Cooking with Computers: Surreptitious Balance Sheets	business	Michael O'Leary	San Jose	Algodata Infosystems	Berkeley	11.95	09/06/1991
4	Cooking with Computers: Surreptitious Balance Sheets	business	Stearns MacFeather	Oakland	Algodata Infosystems	Berkeley	11.95	09/06/1991
5	You Can Combat Computer Stress!	business	Marjorie Green	Oakland	New Moon Books	Boston	2.99	30/06/1991
6	Straight Talk About Computers	business	Dean Straight	Oakland	Algodata Infosystems	Berkeley	19.99	22/06/1991
7	Silicon Valley Gastronomic Treats	mod_cook	Innes del Castillo	Ann Arbor	Binnet & Hardley	Washington	19.99	09/06/1991
8	The Gourmet Microwave	mod_cook	Michel DeFrance	Gary	Binnet & Hardley	Washington	2.99	18/06/1991
9	The Gourmet Microwave	mod_cook	Anne Ringer	Salt Lake City	Binnet & Hardley	Washington	2.99	18/06/1991
10	But Is It User Friendly?	popular_comp	Cheryl Carson	Berkeley	Algodata Infosystems	Berkeley	22.95	30/06/1991
11	Secrets of Silicon Valley	popular_comp	Ann Dull	Palo Alto	Algodata Infosystems	Berkeley	20.00	12/06/1994
12	Secrets of Silicon Valley	popular_comp	Sheryl Hunter	Palo Alto	Algodata Infosystems	Berkeley	20.00	12/06/1994
13	Net Etiquette	popular_comp	Charlene Locksley	San Francisco	Algodata Infosystems	Berkeley	NULL	09/02/2022
14	Computer Phobic AND Non-Phobic Individuals: Beha	psychology	Stearns MacFeather	Oakland	Binnet & Hardley	Washington	21.59	21/10/1991
15	Computer Phobic AND Non-Phobic Individuals: Beha	psychology	Livia Karsen	Oakland	Binnet & Hardley	Washington	21.59	21/10/1991
16	Is Anger the Enemy?	psychology	Anne Ringer	Salt Lake City	New Moon Books	Boston	10.95	15/06/1991
17	Is Anger the Enemy?	psychology	Albert Ringer	Salt Lake City	New Moon Books	Boston	10.95	15/06/1991
18	Life Without Fear	psychology	Albert Ringer	Salt Lake City	New Moon Books	Boston	7.00	05/10/1991
19	Prolonged Data Deprivation: Four Case Studies	psychology	Johnson White	Menlo Park	New Moon Books	Boston	19.99	12/06/1991
20	Emotional Security: A New Algorithm	psychology	Charlene Locksley	San Francisco	New Moon Books	Boston	7.99	12/06/1991
21	Onions, Leeks, and Garlic: Cooking Secrets of the M	trad_cook	Sylvia Panteley	Rockville	Binnet & Hardley	Washington	20.95	21/10/1991
22	Fifty Years in Buckingham Palace Kitchens	trad_cook	Reginald Blotchet	Corvallis	Binnet & Hardley	Washington	11.95	12/06/1991
23	Sushi, Anyone?	trad_cook	Michael O'Leary	San Jose	Binnet & Hardley	Washington	14.99	12/06/1991
24	Sushi, Anyone?	trad_cook	Burt Gringlesby	Covelo	Binnet & Hardley	Washington	14.99	12/06/1991
25	Sushi, Anyone?	trad_cook	Akiko Yokomoto	Walnut Creek	Binnet & Hardley	Washington	14.99	12/06/1991