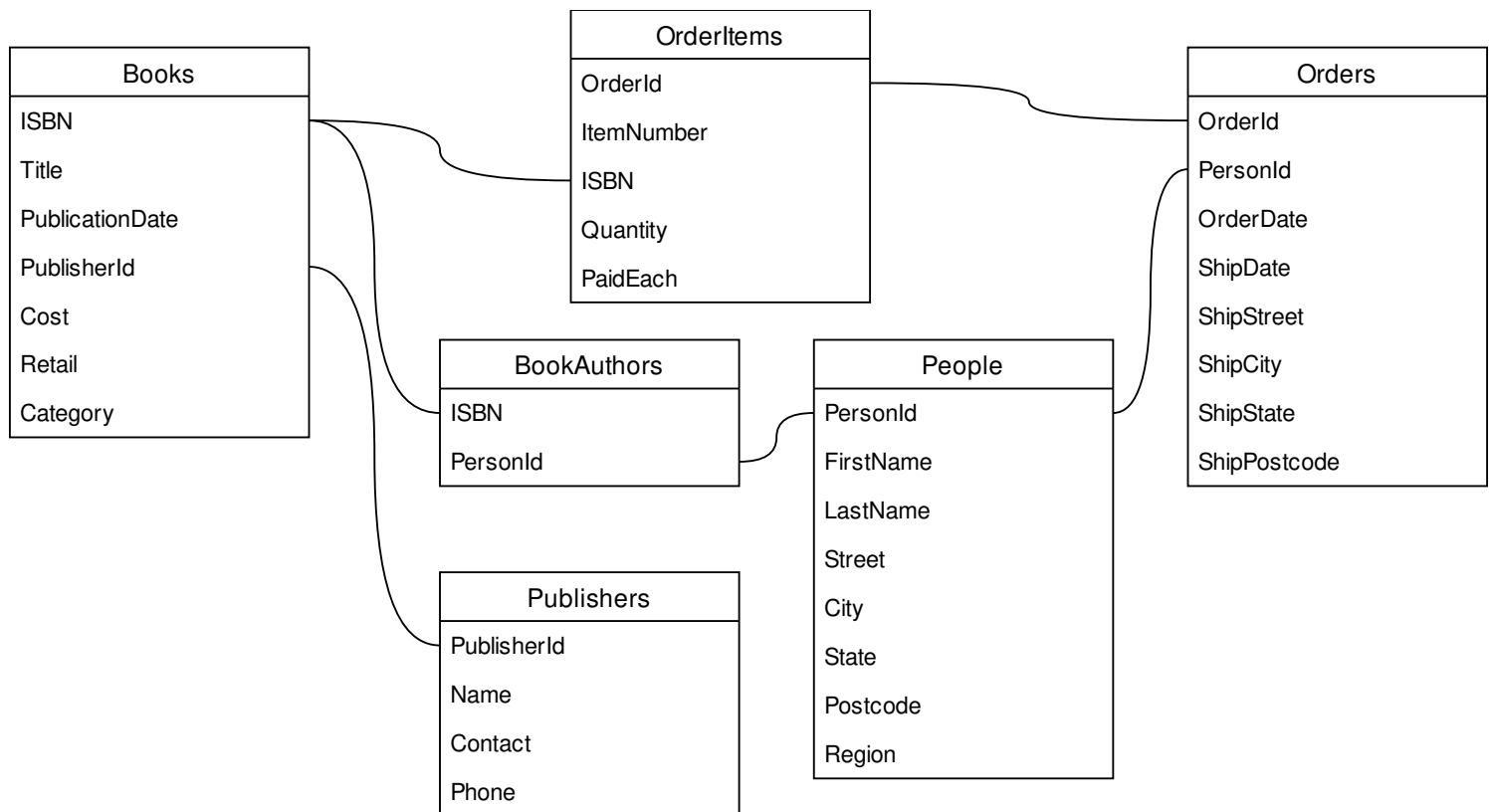# Week 2 Assessment Task

The JustLeeBooks database

This assessment task asks you to **write ten queries**, each of which answers a question about the data in a database for a fictitious company called JustLeeBooks.

> **i** Each question is worth 2 marks, for a total of 20 marks.

Here is the schema of the JustLeeBooks database:

Books
ISBN
Title
PublicationDate
PublisherId
Cost
Retail
Category

OrderItems
OrderId
ItemNumber
ISBN
Quantity
PaidEach

Orders
OrderId
PersonId
OrderDate
ShipDate
ShipStreet
ShipCity
ShipState
ShipPostcode

BookAuthors
ISBN
PersonId

People
PersonId
FirstName
LastName
Street
City
State
Postcode
Region

Publishers
PublisherId
Name
Contact
Phone

You might find it helpful to use the following code box to get familiar with the structure of this database, and the data in its tables:

```
CREATE TABLE BookAuthors (ISBN text,PersonId int);
INSERT INTO BookAuthors VALUES ('0132149871',21),('0299282519',21),('0401140733',22),('1059831198',
CREATE TABLE Books (ISBN tinytext,Title tinytext,PublicationDate date,PublisherId int,Cost decimal(
INSERT INTO Books VALUES ('1059831198','BODYBUILD IN 10 MINUTES A DAY','2021-01-05',4,18.75,30.95,'
CREATE TABLE OrderItems (OrderId int,ItemNumber int,ISBN tinytext,Quantity int,PaidEach decimal(5,2
INSERT INTO OrderItems VALUES (1000,1,'3437212490',1,19.95),(1001,1,'9247381001',1,31.95),(1001,2,'
CREATE TABLE Orders (OrderId int,PersonId int,OrderDate date,ShipDate date,ShipStreet tinytext,Ship
INSERT INTO Orders VALUES (1000,5,'2009-03-31','2009-04-02','1201 ORANGE AVE','SEATTLE','WA','98114
```

```
CREATE TABLE People (PersonId int,FirstName tinytext,LastName tinytext,Street tinytext,City tinytex
INSERT INTO People VALUES (1,'BONITA','MORALES','P.O. BOX 651','EASTPOINT','FL','32328','SE'),(2,'R
CREATE TABLE Publishers (PublisherId int,`Name` tinytext,Contact tinytext,Phone tinytext);
INSERT INTO Publishers VALUES (1,'PRINTING IS US','TOMMIE SEYMOUR','000-714-8321'),(2,'PUBLISH OUR
```

```
SHOW TABLES
```

```
CREATE TABLE BookAuthors (ISBN text,PersonId int);
INSERT INTO BookAuthors VALUES ('0132149871',21),('0299282519',21),('0401140733',22),('1059831198',
CREATE TABLE Books (ISBN tinytext,Title tinytext,PublicationDate date,PublisherId int,Cost decimal(
INSERT INTO Books VALUES ('1059831198','BODYBUILD IN 10 MINUTES A DAY','2021-01-05',4,18.75,30.95,'
CREATE TABLE OrderItems (OrderId int,ItemNumber int,ISBN tinytext,Quantity int,PaidEach decimal(5,2
INSERT INTO OrderItems VALUES (1000,1,'3437212490',1,19.95),(1001,1,'9247381001',1,31.95),(1001,2,'
CREATE TABLE Orders (OrderId int,PersonId int,OrderDate date,ShipDate date,ShipStreet tinytext,Ship
INSERT INTO Orders VALUES (1000,5,'2009-03-31','2009-04-02','1201 ORANGE AVE','SEATTLE','WA','98114
CREATE TABLE People (PersonId int,FirstName tinytext,LastName tinytext,Street tinytext,City tinytex
INSERT INTO People VALUES (1,'BONITA','MORALES','P.O. BOX 651','EASTPOINT','FL','32328','SE'),(2,'R
CREATE TABLE Publishers (PublisherId int,`Name` tinytext,Contact tinytext,Phone tinytext);
INSERT INTO Publishers VALUES (1,'PRINTING IS US','TOMMIE SEYMOUR','000-714-8321'),(2,'PUBLISH OUR
```

```
DESCRIBE People
```

```
CREATE TABLE BookAuthors (ISBN text,PersonId int);
INSERT INTO BookAuthors VALUES ('0132149871',21),('0299282519',21),('0401140733',22),('1059831198',
CREATE TABLE Books (ISBN tinytext,Title tinytext,PublicationDate date,PublisherId int,Cost decimal(
INSERT INTO Books VALUES ('1059831198','BODYBUILD IN 10 MINUTES A DAY','2021-01-05',4,18.75,30.95,'
CREATE TABLE OrderItems (OrderId int,ItemNumber int,ISBN tinytext,Quantity int,PaidEach decimal(5,2
INSERT INTO OrderItems VALUES (1000,1,'3437212490',1,19.95),(1001,1,'9247381001',1,31.95),(1001,2,'
CREATE TABLE Orders (OrderId int,PersonId int,OrderDate date,ShipDate date,ShipStreet tinytext,Ship
INSERT INTO Orders VALUES (1000,5,'2009-03-31','2009-04-02','1201 ORANGE AVE','SEATTLE','WA','98114
CREATE TABLE People (PersonId int,FirstName tinytext,LastName tinytext,Street tinytext,City tinytex
INSERT INTO People VALUES (1,'BONITA','MORALES','P.O. BOX 651','EASTPOINT','FL','32328','SE'),(2,'R
CREATE TABLE Publishers (PublisherId int,`Name` tinytext,Contact tinytext,Phone tinytext);
INSERT INTO Publishers VALUES (1,'PRINTING IS US','TOMMIE SEYMOUR','000-714-8321'),(2,'PUBLISH OUR
```

```
SELECT * FROM People LIMIT 3
```

Most profitable books

Which books are the most profitable?

Produce a list of books, showing their title and profit (rounded to 2 decimal places), sorted by profit descending, then name ascending.

This question is worth 2 marks.

Your results should appear as the following:

Title	Profit
PAINLESS CHILD-REARING	41.95
HOLY GRAIL OF ORACLE	28.70
DATABASE IMPLEMENTATION	24.55
BUILDING A CAR WITH TOOTHPICKS	22.15
SHORTEST POEMS	18.10
E-BUSINESS THE EASY WAY	16.60
HOW TO MANAGE THE MANAGER	16.55
BODYBUILD IN 10 MINUTES A DAY	12.20
HOW TO GET FASTER PIZZA	12.10
THE WOK WAY TO COOK	9.75
REVENGE OF MICKEY	7.80
COOKING WITH MUSHROOMS	7.45
BIG BEAR AND LITTLE DOVE	3.63
HANDCRANKED COMPUTERS	3.20

Most popular books

Which books are the most popular?

Produce a list of books, showing their title and the number of orders, sorted by number of orders descending, then name ascending.

This question is worth 2 marks.

Your results should appear as the following:

Title	Number
COOKING WITH MUSHROOMS	8
DATABASE IMPLEMENTATION	7
PAINLESS CHILD-REARING	6
REVENGE OF MICKEY	5
BIG BEAR AND LITTLE DOVE	4
HOLY GRAIL OF ORACLE	3
E-BUSINESS THE EASY WAY	2
HANDCRANKED COMPUTERS	2
BODYBUILD IN 10 MINUTES A DAY	1
HOW TO MANAGE THE MANAGER	1
SHORTEST POEMS	1

Daily orders

What are the daily orders?

Produce a list of days, showing the number of books ordered on that day, and their total cost paid across those books (as column "Retail"), sorted by day.

This question is worth 2 marks.

Your results should appear as the following:

OrderDate	Number	Retail
2009-03-31	5	249.25
2009-04-01	7	372.20
2009-04-02	8	375.75
2009-04-03	10	405.70
2009-04-04	6	167.30
2009-04-05	4	117.85

Unshipped orders

What unshipped orders are there?

Produce a list of orders that have not yet shipped, showing all columns, sorted by order date ascending.

This question is worth 2 marks.

Your results should appear as the following:

OrderId	PersonId	OrderDate	ShipDate	ShipStreet	ShipCity	ShipState	ShipPostcode
1012	17	2009-04-03		1295 WINDY AVENUE	KALMAZOO	MI	49002
1015	20	2009-04-04		557 GLITTER ST.	TRENTON	NJ	8606
1016	3	2009-04-04		9901 SEMINOLE WAY	TALLAHASSEE	FL	32307
1018	1	2009-04-05		95812 HIGHWAY 98	EASTPOINT	FL	32328
1019	18	2009-04-05		1008 GRAND AVENUE	MACON	GA	31206
1020	8	2009-04-05		195 JAMISON LANE	CHEYENNE	WY	82003

Cities with orders

From which cities have books been ordered?

Produce a list of cities that have book orders, sorted by name in ascending order. Don't show duplicates.

This question is worth 2 marks.

Your results should appear as the following:

ShipCity
ATLANTA
AUSTIN
BOISE
CHEYENNE
CHICAGO
CODY
EASTPOINT
KALMAZOO
MACON
MIAMI
MORRISTOWN
SEATTLE
TALLAHASSEE
TRENTON

Best customers

Who are the best customers?

Produce a list of customers, showing their first and last name, the number of books they have ordered, and the amount they have spent, sorted by amount spent descending.

This question is worth 2 marks.

Your results should appear as the following:

FirstName	LastName	NumBooks	AmountSpent
TAMMY	GIANA	8	379.85
JAKE	LUCAS	3	202.85
KENNETH	FALAH	3	190.85
BONITA	MORALES	5	182.75
BECCA	NELSON	5	166.40
LEILA	SMITH	2	139.95
REESE	MCGOVERN	2	111.90
GREG	MONTIASA	2	61.95
CINDY	GIRARD	3	61.90
JASMINE	LEE	1	55.95
JENNIFER	SMITH	1	55.95
THOMAS	PIERSON	2	39.90
KENNETH	JONES	1	19.95
STEVE	SCHELL	2	17.90

Never-ordered books

Which books have never been ordered?

List all the books that have never been ordered, showing their titles in ascending order.

This question is worth 2 marks.

Your results should appear as the following:

Title
BUILDING A CAR WITH TOOTHPICKS
HOW TO GET FASTER PIZZA
THE WOK WAY TO COOK

Shipping time

How long does it take ship books?

Find the average number of days it takes to ship an order once it has been placed. You can assume that if an order's ShipDate is NULL then the order has not yet been shipped.

This question is worth 2 marks.

Your results should appear as the following:

NumDays
1.4000

Multi-author books

Which books have multiple authors?

Produce a list of books that have more than one author. Show the title of the book, the number of authors, and a list of author last names in alphabetical order, sorted by number of authors in descending order, then by title.

This question is worth 2 marks.

Your results should appear as the following:

Title	NumAuthors	Authors
DATABASE IMPLEMENTATION	3	ADAMS,AUSTIN,PETERSON
PAINLESS CHILD-REARING	3	BAKER,FIELDS,ROBINSON
BODYBUILD IN 10 MINUTES A DAY	2	PORTER,SMITH
HANDCRANKED COMPUTERS	2	WHITE,WHITE

Most recent orderers

Which customers have most recently placed orders?

Produce a list of customers that have most recently placed orders. That is, for the most recent day on which orders have been placed, list the customers who placed an order on that day. Show their last name, then their first name, sorted by last name and then first name.

You should use a subquery to find the most recent day on which orders have been placed.

This question is worth 2 marks.

Your results should appear as the following:

LastName	FirstName
JONES	KENNETH
MONTIASA	GREG
MORALES	BONITA