/\* Provide a list of customer names, along with the total dollar amount each customer has spent. \*/

CUSTOMERS ← CUSTOMER ⋈ customer\_ID = order\_customer\_ID ORDERS

CUST\_ORDERS ← CUSTOMERS ⋈ Order\_ISBN = ISBN BOOKS

Πcustomer\_lastname, customer\_firstname, ISBN ζ SUM (price) CUST\_ORDERS

/\* Provide a list of customer names and e-mail addresses for customers who have spent more than the average customer. \*/

BOOK\_ORDER ← BOOKS ⋈ ISBN = order\_ISBN ORDERS

CUST\_ORDERS ← BOOK\_ORDER ⋈ order\_ID = orderID ORDERBOOK

AVERAGEPRICE ← ΠCustomer\_IDζSUM(order\_quantity) \* price

ΠCustomer\_firstname, customer\_lastname, customer\_email, order\_Id ζSUM (PRICE) > AVERAGEPRICECUST\_ORDERS

/\* Provide a list of the titles in the database and associated total copies sold to customers, sorted from the title that has sold the most individual copies to the title that has sold the least. \*/

BOOK\_ORDER ← BOOKS ⋈ ISBN = order\_ISBN ORDERS

ALL\_ORDERS ← BOOK\_ORDER ⋈ order\_id = Order\_id ORDERBOOK

ΠTitle ζSUM (price) , title ALL\_ORDERS

/\* Provide a list of the titles in the database and associated dollar totals for copies sold to customers,sorted from the title that has sold the highest dollar amount to the title that has sold the smallest. \*/

BOOK\_ORDER ← BOOKS ⋈ ISBN = order\_ISBN ORDERS

ALL\_ORDERS ← BOOK\_ORDER ⋈ order\_id = order\_idORDERBOOK

TOTALPRICE ← Title ζ SUM ( order\_quantity) \* price

ΠTOTALPRICE, TITLE ALL\_ORDERS

/\* Find the most popular author in the database (i.e. the one who has sold the most books). \*/

BOOK\_ORDER ← BOOKS ⋈ ISBN = Order\_ISBN ORDERS

ALL\_ORDERS ← BOOK\_ORDER ⋈ Order\_Id = order\_id ORDERBOOK

AUTHOR\_BOOK ← ALL\_ORDERS ⋈ author\_id = author\_id AUTHOR

COUNT\_SOLD ← author\_id ζSUM(order\_quantity)

Πauthor\_lastname, author\_firstname, author\_IdζMAX(COUNT\_SOLD)

/\* Find the most profitable author in the database for this store (i.e. the one who has brought in the most money) \*/

BOOK\_ORDER ← ORDERS ⋈ order\_ISBN = ISBN BOOKS

AUTHOR\_BOOK ← BOOK\_ORDER ⋈ author\_Id = author\_id AUTHOR

ALL\_ORDERS ← AUTHOR\_BOOK ⋈ Order\_ID = order\_Id ORDERBOOK

PRICE\_SOLD ← Author\_id ζSUM(order\_quantity) \* price

Πauhtor\_lastname, author\_firstname, author\_id ζMAX (PRICE\_SOLD)

/\* Provide a list of customer information for customers who purchased anything written by the most profitable author in the database. \*/

/\* Provide the list of authors who wrote the books purchased by the customers who have spent more than the average customer. \*/

AUTHOR\_BOOK ← AUTHOR ⋈ author\_id = author\_id BOOKS

CUST\_ORDER ← CUSTOMER ⋈ customer\_id = customer\_id ORDERS

BOOK\_ORDER ← AUTHOR\_BOOK ⋈ ISBN = order\_ISBN CUST\_ORDER

AUTHOR\_LIST ← σ price > AVERAGE(price) BOOK\_ORDER

Πauthor\_firstname, author\_lastname (AUTHOR\_LIST)