/\* Find the titles of all books by Pratchett that cost less than $10 \*/

JOINED-AUTHOR ←AUTHOR ⋈ (author-id = author-id)(BOOKS)

PRATCHETT-AUTHOR ← σ(author\_lastname = “Pratchett” AND price < 10)(JOINED-AUTHOR)

πtitle (PRATCHETT-AUTHOR)

/\* Give all the titles and their dates of purchase made by a single customer. Customer ID can be changed \*/

Let customer\_id = 3

CHOSEN-CUSTOMER ← σ(customer\_id = 3)(CUSTOMER)

CUSTOMER-ORDERS ← ORDERS ⋈ (order\_customer\_id = customer\_id)(CHOSEN-CUSTOMER)

πtitle, order\_date (BOOKS ⋈(ISBN = ISBN)(CUSTOMER-ORDERS))

/\* Find the titles and ISBNs for all books with less than 5 copies in stock \*/

π ISBN, Title(σQuantity < 5(Warehouse)⋈warehouse\_ISBN = ISBNBooks)

/\* Give all the customers who purchased a book by Pratchett and the titles of Pratchett books they purchased \*/

Customer\_ID ← (Order ⋈ (order\_customer\_id = customer\_id)Customer)

Author\_Name← σ(author\_LastName=”Pratchett” )(Books)

π customer\_firstname, customer\_lastname, Title, Author\_Name ⋈(ISBN = Order\_ISBN) (Customer\_ID)

/\* Find the total number of books purchased by a single customer. Customer ID can be changed \*/

Let customer\_id = 1

CHOSEN-CUSTOMER ← σ(customer\_id = X)(CUSTOMER)

CUST\_ORDERS ← CHOSEN-CUSTOMER ⋈ (customer-id = order\_customer-id)(ORDERS)

BOOK\_ORDER ← CUST\_ORDERS ⋈ (order\_id = Order\_id)(ORDERBOOK)

ζ SUM quantity (BOOK\_ORDER)

/\* Find the customer who has purchased the most books and the total number of books they have purchased \*/

CUST\_ORDERS ← CUSTOMER ⋈ (customer\_id = customer\_id)(ORDERS)

BOOK\_ORDERS ← CUST\_ORDERS ⋈ (order\_id = Order\_id) (ORDERBOOK)

CUST\_SUM ← customer\_id,customer\_lastname ζ SUM quantity (BOOK\_ORDERS)

MAX\_ORDER ← customer\_id, customer\_lastname ζ MAX quantity (CUST\_SUM)

π customer\_lastname, quantity (MAX\_ORDER)