אלגברת יחסים

Quire 1

π title,in_stock σ title='leaves of grass' And in_sock > 0 (books)

Quire 2

π first_name σ books_transaction (min(order_date)⋈customer) ⋈ customer_id1 ⋈ id;

Quire 3

π title, min (date_reseived)σ books ;

Quire 4

π (*) σ order_status <> "delivered" (books_transaction);

Quire 5

π sum (quantity)⋈(books (books.id ⋈)) σ books.title = 'in search of lost time'(books_transaction);

Quire 6

π name_writer ⋈ (books_transaction)(id⋈books_id)⋈writer_has_books(books_id⋈books_id)⋈writer(id⋈writer_id)σ

order_date>='2019-01-01'And order_date<'2019-10-01'(books_transaction);

Quire 7

π first_name,quantity ⋈ (customer(customer_id1⋈customer.id))(books_transaction);

Quire 8

π title ⋈
(books_has_languages(id⋈books_id))⋈(languages(books_id⋈id))(books);

Quire 9

π
first_name,last_name,title,order_date,price⋈(books(books_id⋈id))⋈(cus
tomer(id⋈customer_id1))σ first_name='fofo'And
last_name='sese'(books_transaction);

Quire 10

π first_name, last_name, order_date,title, quantity, price, in_sock,
total⋈(books(books_id⋈id))⋈(customer(id⋈books_id))σ
first_name='fofo' And last_name='sese'(books_transaction);

Quire 11

π order_number,price, weight,quantity, name_1, name_2,
price,⋈(books(books_id⋈id))⋈(deliveries(deliveries_id⋈books_id))⋈

(deliveries_methods(delivery_methid_id⋈id))(books_trasaction);

Quire 12

π first_name, last_name , title,
quantity,order_number,order_date⋈(books_transaction(id⋈books_id))⋈

(customer(customer_id1⋈id))σfirst_name='fofo' and last_name='sese'
(books);

Quire 13

π order_status σ id=12444 (books_transaction);

Quire 14

π ρ num_delivery_by_xpress_fer_month
count(month(order_date))⋈(deliveries(deliveries_id⋈deliveries_deliverie
s_id1)⋈

(deliveries_method(deliveries_method_id⋈deliveries_deliveries_id1))σ

name_1='xpress' and month(order_date)=8(books_transaction);

Quire 15

π method,total,month,
order_date,total,count(total),sum(total)⋈(books(id⋈books_id))

σ method='bit_app' and month(order_date)=07(books_transaction);

Quire 16

π year(order_date),sum(total),σ order_date>= '2019-01-01'And
order_date<=

'2020-01-01'(books_transaction);

Quire 17

π (name_1(p deliveriesName name_1 ,p amount , count(name_1)(from
order_date(deliveries))))
⋈(books_transaction(deliveries_is⋈deliveries_deliveries_id1))σ
order_date between '2019-01-01' And now();

Quire 18

π order_date, order_number,year_of_publication,quantity,total,booksId (ρ
booksId id)

⋈

(books_has_publication(id⋈books_id))⋈

(publication(publication_id⋈id))⋈(books_transaction

(id⋈books_id))σ order_date='2013-12-11'(books);

Quire 19

π id, order_date , first_name,last_name, lines_phone
⋈(books_transaction(id⋈customer_id1))σorder_date <

'2018-07-28'(customer);

Quire 20

π shipped_date,
first_name,last_name,⋈(customer(customer_id1⋈id))σorder_date<
shipped_date(books_transaction);

Quire 21

π ρ month month(date_reseived),ρ
total_books_in_stock(in_stock)(month(date_reseived)ρ month
month(date_reseived),ρ total_books_in_stock(in_stock)(σ
year(date_reseived=2019(books))));

Quire 22A

π ρ total_paid , sum(total), ρ total_num_of_books sum(quantity)σ
order_date>='2019-12-01' And order_date'2019-12-01'(books_transaction);

Quire 22B

π ρ month month(month_payment),price,expenses_total,(ρ store_profit
(price)-(expenses_total))(store_id ρ month
month(month_payment),price,expenses_total,(ρ store_profit (price)-
(expenses_total)(σ MONTH(month_payment) = 04 and
YEAR(month_payment) = 2020 and MONTH(order_date) = 04 and
YEAR(order_date) = 2020)(store_payment))⋈(store_order);

Quire 23

π ρ month month(order_date),ρ total(total)(order_date ρ month
month(order_date),ρ total(total)(σ
year(oredr_date)='2019'(books_transaction)));

Quire 24

π first_name, ρ salary_month Month(month) , (salary⋈(id⋈employy_id))σ MONTH(month)=10 or first_name= 'uouo' (salary_per_month)⋈(employee(id⋈employee_id);

Quire 25

π first_name, last_name, employee_id,(employee_id first_name, last_name, employee_id (σ order_date=10(employee)))⋈(books_transaction(employee_id⋈employee_employee_id));
