מגישים: שגיא גרנות 302999693

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הקוד ב- Sql + אלגברת היחסים

σ inStck = "1"(book)	SELECT * FROM book WHERE inStock = 1;	1
orders ⋈ book π title(book) π _status(orders) σ _status != 'sold'	SELECT title, _status FROM orders INNER JOIN book ON orders.book_id = book.book_id WHERE _status != 'sold';	2
customer	SELECT * FROM customer;	3
supplier	SELECT * FROM supplier;	4
σ purchase_date>'2018-07-26' AND purchase_date<'2018-07-26'(purchase)	SELECT * FROM purchase WHERE purchase_date BETWEEN '2018-07-26' AND '2018-07-29';	5
σ purchase_date>'2018-07-26' AND purchase_date<'2018-07-26'(purchase)	SELECT * FROM bookstore.disc_global WHERE NOW() BETWEEN start_date AND end_date;	6
σ title = "Life of Pi" (book)	SELECT * FROM book WHERE title = "Life of Pi";	7
π supplier_name(supplied_by) (σ title = "Lord of the Flies" (supplied_by ⋈ book ⋈ supplier))	SELECT supplier_name FROM supplied_by INNER JOIN book ON book.book_id = supplied_by.book_id INNER JOIN supplier ON supplied_by.supplier_id = supplier.supplier_id WHERE title = "Lord of the Flies";	8
π COUNT(1) (σ purchase.purchase_date > '2018-07-26' ∧ book_id = 10(purchase ⋈ purchase_info))	SELECT COUNT(1) FROM purchase RIGHT JOIN purchase_info ON purchase.purchase_id = purchase_info.purchase_id WHERE purchase.purchase_date > '2018-07-26' AND book_id = 10 AND isCanceled = 0;	9
π COUNT(1) (σ purchase.purchase_date > '2018-07-26' ∧ customer_id = 10(purchase ⋈ purchase_info))	SELECT COUNT(1) FROM purchase RIGHT JOIN purchase_info ON purchase.purchase_id = purchase_info.purchase_id WHERE purchase.purchase_date > '2018-07-26' AND customer_id = 10;	10
π customer_id (σ purchase.purchase_date > '2018-07-26' (purchase ⋈ purchase_info))	SELECT customer_id, COUNT(customer_id) as most FROM purchase RIGHT JOIN purchase_info ON purchase.purchase_id = purchase_info.purchase_id WHERE purchase.purchase_date > '2018-07-26'	11

	GROUP BY customer_id ORDER BY most DESC LIMIT 1;	
π supplier_id (σ order_date > '2018-07-25' (orders))	SELECT supplier_id, COUNT(supplier_id) as most FROM orders WHERE order_date > '2018-07-25' GROUP BY supplier_id ORDER BY most DESC LIMIT 1;	12
π COUNT(order_id) (σ order_date > '2018-07-28' ∧ order_date < '2018-07-29' (orders))	SELECT COUNT(order_id) FROM bookstore.orders WHERE order_date BETWEEN '2018-07-28' AND '2018-07-29';	13
π COUNT(order_id) (σ order_date > '2018-07-28' ∧ order_date < '2018-07-29' ∧ _status = 'sold' (orders))	SELECT COUNT(order_id) FROM bookstore.orders WHERE order_date > '2018-07-28' AND order_date < '2018-07-29' AND _status = 'sold';	14
π title,price,disc (σ customer_id = 10 ∧ isCanceled = 0 ∧ purchase_date > '2018-05-22' (purchase_info ⋈ purchase ⋈ book)	SELECT book.title, book.price, purchase_info.disc FROM purchase_info INNER JOIN purchase ON purchase_info.purchase_id = purchase.purchase_id INNER JOIN book ON purchase_info.book_id = book.book_id WHERE customer_id = 10 AND isCanceled = 0 AND purchase.purchase_date > '2018-05-22';	15
π SUM(price) (σ purchase_date > '2018-01-01' ∧ purchase_date < '2018-10-31' ∧ purchase_info.isCanceled = 0(purchase_info ⋈ purchase ⋈ book))	SELECT SUM(book.price) FROM ((purchase_info INNER JOIN purchase ON purchase_info.purchase_id = purchase.purchase_id) INNER JOIN book ON purchase_info.book_id = book.book_id) WHERE purchase_date > '2018-01-01' AND purchase_date < '2018-10-31' AND purchase_info.isCanceled = 0;	16
π COUNT(customer_id) (σ join_date > '2018-06-01'(customer))	SELECT COUNT(customer_id) FROM customer WHERE join_date > '2018-06-01';	17
π SUM(supplied_by.price) (σ supplier_id = 10 ∧ order_date > '2018-01-01' ∧ order_date < '2018-12-12'(orders ⋈ supplied_by)	SELECT SUM(supplied_by.price) FROM orders INNER JOIN supplied_by ON orders.supplier_id = supplied_by.supplier_id AND orders.book_id = supplied_by.book_id WHERE orders.supplier_id = 10 AND orders.order_date BETWEEN '2018-01-01' AND '2018-12-12';	18
π SUM(book.price) (σ employee_id = 1 ∧ purchase_date > '2018-07-10' ∧ purchase_date < '2018-08-10'(purchase_info ⋈ purchase ⋈ book))	SELECT SUM(book.price) FROM ((purchase_info INNER JOIN purchase ON purchase_info.purchase_id = purchase.purchase_id) INNER JOIN book ON purchase_info.book_id = book.book_id)	19

	WHERE purchase_info.employee_id = 1 AND purchase.purchase_date BETWEEN '2018-07-10' AND '2018-08-10';	
π book_id, title, COUNT(book_id) (σ purchase_date > '2018-07-26' ∧ purchase_date < '2018-07-31'(purchase ⋈ purchase_info ⋈ book))	SELECT purchase_info.book_id, title, COUNT(purchase_info.book_id) as most FROM purchase RIGHT JOIN purchase_info ON purchase.purchase_id = purchase_info.purchase_id RIGHT JOIN book ON purchase_info.book_id = book.book_id WHERE purchase.purchase_date BETWEEN '2018-07-26' AND '2018-07-31' GROUP BY purchase_info.book_id ORDER BY most DESC LIMIT 10;	20