אלגברת היחסים-

1. book ( current !=0 (R))
2. (order order\_book) ( order\_status != "closed" AND orders.order\_num= order\_book.order\_num)
3. customer
4. supplier
5. deal ( (deal.deal\_date>x^deal.deal\_date<y))
6. book ( book.global\_discount>0)
7. book ( book.name =x)
8. (book supplier\_book) ( (book.name= supplier\_book.book\_name ^ supplier\_book.book\_name =x (p-> ("supplier\_id))))
9. (deal deal\_book) ( (deal.deal\_num =deal\_book.deal\_num ^ book\_name = x ^ deal\_date >=y))
10. (deal deal\_book) ( (deal.deal\_num =deal\_book.deal\_num ^ deal.customer\_id =y ^ deal.deal\_date >=x ))
11. (customer.first\_name, customer.last\_name deal\_book\_count.count\_book) as counter (customer ( (deal.customer\_id, COUNT(\*) AS count\_books deal) deal\_book deal\_book.deal\_num= deal.deal\_num ^ deal.deal\_date >= x p (deal.deal\_num)) AS deal\_books\_count ON deal\_books\_count.customer\_id = customer.customer\_id group bu first\_name ORDER BY counter desc;")
12. supplier.supplier\_id, supplier.supplier\_name, SUM(order\_books.count\_books) (supplier) ( order.supplier\_id, COUNT(\*) AS count\_books (orders) order\_book ( order\_book.order\_num = orders.order\_num ^ ^ orders.order\_date >= X) p(orders.order\_num) AS order\_books\_count (order\_books\_count.supplier\_id = supplier.supplier\_id (supplier\_id)))
13. orders ( (order\_date >= x ^ order\_date <= y))
14. (orders.order\_num, orders.order\_date, first\_name, last\_name) (orders order\_book customer) (order\_date <x ^ order\_date> y ^ order\_status = "closed" ^ orders.order\_num = order\_book.order\_num ^ orders.customer\_id = customer.customer\_id group by order\_num)
15. first\_name, last\_name, SUM(ceiling(deal\_sum X deal.discount)) AS total\_discount ( (deal customer))( (deal\_date >= x ^ deal.customer\_id = y ^ customer.customer\_id = deal.customer\_id))
16. (deal\_sum) as salesone ( deal (deal\_date < x/01/01' ^deal\_date > ' y/03/31')

((deal\_sum) as salestwo ( deal (deal\_date < 'x/04/01' ^deal\_date > 'y/06/31')

((deal\_sum) as salesthree ( deal (deal\_date < 'x/07/01' ^deal\_date> 'y/09/31')

((deal\_sum) as salesfour ( deal (deal\_date < 'x/10/01' ^deal\_date > 'y/12/31')

1. customer ( join\_date >= "x")
2. book\_name, supplier\_price orders book ( order\_book.book\_name = "book.name" ^ orders.order\_date <x ^ orders.order\_date >y ^ orders.order\_num order\_book.order\_num ^ orders.supplier\_id =z)
3. first\_name, last\_name, SUMM(deal\_sum) (sales deal) worker ( worker.worker\_id =x ^ employee\_id = y ^ deal.deal\_date >= z ^ deal.deal\_date <= r ^ is\_canceled = false)
4. deal\_book.book\_name, COUNT(\*) AS book\_count (deal) deal\_book ( deal.deal\_num = deal\_book.deal\_num ^ deal.deal\_date >= x ^ deal.deal\_date <= y ^ deal.is\_canceled = false p (book\_name-> book\_count DESC)