**Задача 4 (алгебра Кодда)**

PROJECT (

Customers TIMES OrderItems TIMES Orders TIMES Products

WHERE (

Orders.ORDER\_NUM=20005

AND OrderItems.ORDER\_NUM=Orders.ORDER\_NUM

AND Orders.CUST\_ID=Customers.CUST\_ID

AND OrderItems.PROD\_ID=Products.PROD\_ID

)

){

CUST\_NAME as "client\_name",

UPPER(TRIM(CUST\_COUNTRY))

|| ' '

|| TRIM(CUST\_STATE)

|| ' '

|| TRIM(CUST\_CITY)

|| ' ('

|| TRIM(CUST\_ZIP)

|| ') '

|| TRIM(CUST\_ADDRESS) as "client\_adress",

ORDER\_DATE,

PROD\_NAME,

PROD\_PRICE

};

**Задача 3 (SQL)**

SELECT

VEND\_NAME as "vendor\_name",

UPPER(TRIM(VEND\_COUNTRY))

|| ' '

|| TRIM(VEND\_STATE)

|| ' '

|| TRIM(VEND\_CITY)

|| ' ('

|| TRIM(VEND\_ZIP)

|| ') '

|| TRIM(VEND\_ADDRESS) as "vendor\_adress",

ROUND(SUM(PROD\_PRICE), 1) as "product\_money",

ROUND(SUM(PROD\_PRICE), 0) as "product\_money\_$",

AVG(PROD\_PRICE) as "mean\_price",

ROUND(MAX(PROD\_PRICE), 0) as "max\_price\_$"

FROM VENDORS, PRODUCTS

WHERE

VEND\_NAME = 'Bears R Us'

AND

VENDORS.VEND\_ID=PRODUCTS.VEND\_ID

GROUP BY

VEND\_NAME, VEND\_COUNTRY, VEND\_STATE, VEND\_CITY, VEND\_ZIP, VEND\_ADDRESS;

**Задача 2 (реляційна алгебра)**

a) у алгебрі Кодда

PROJECT (

CUSTOMERS TIMES PROJECT (

ORDERS TIMES ORDERITEMS TIMES CUSTOMERS

WHERE (

CUST\_NAME = 'Village Toys'

AND

CUSTOMERS.CUST\_ID=ORDERS.CUST\_ID

AND

ORDERS.ORDER\_NUM=ORDERITEMS.ORDER\_NUM)

){

ROUND(SUM(ITEM\_PRICE \* QUANTITY), 1) as order\_money,

ROUND(SUM(ITEM\_PRICE \* QUANTITY), 0) as order\_money\_$,

AVG(ITEM\_PRICE \* QUANTITY) as mean\_price,

ROUND(MAX(ITEM\_PRICE \* QUANTITY), 0) as max\_price\_$

}

WHERE (CUST\_NAME = 'Village Toys')

){

CUST\_NAME as "customer\_name",

UPPER(TRIM(CUST\_COUNTRY)) || ' ' || TRIM(CUST\_STATE) || ' ' || TRIM(CUST\_CITY) || ' (' || TRIM(CUST\_ZIP) || ') ' || TRIM(CUST\_ADDRESS) as "client\_address",

order\_money as "order\_money",

order\_money\_$ as "order\_money\_$",

mean\_price as "mean\_price",

max\_price\_$ as "max\_price\_$"

};

б) у реляційній алгебрі