```
-- for customer.tbl
customer = LOAD '/user/bigdata/customer.tbl' using PigStorage('|')
as
(CUSTOMER_ID:int,CUSTOMER_CODE:chararray,COMPANY_NAME:chararray,CONTACT_NAME:chararra
y, CONTACT_TITLE: chararray, CITY: chararray, REGION: chararray, POSTAL_CODE: int, COUNTRY: chararray, PH
ONE:int,FAX:int);
-- for order_detail.tbl
order_detail = LOAD '/user/bigdata/order_detail.tbl' using PigStorage('|')
(ORDER ID:int,PRODUCT ID:int,CUSTOMER ID:int,SALESPERSON ID:int,UNIT PRICE:float,QUANTITY:int,
DISCOUNT:float);
-- for product.tbl
product = LOAD '/user/bigdata/product.tbl' using PigStorage('|')
as
(PRODUCT_ID:int,PRODUCT_NAME:chararray,UNIT_PRICE:float,UNITS_IN_STOCK:int,UNITS_ON_ORDER
:int,DISCONTINUED:chararray);
-- for salesperson.tbl
salesperson = LOAD '/user/bigdata/salesperson.tbl' using PigStorage('|')
as
(EMPLOYEE_ID:int,LASTNAME:chararray,FIRSTNAME:chararray,TITLE:chararray,BIRTHDATE:chararray,HI
REDATE:chararray, NOTES:chararray);
```

```
-- for order.tbl
orders = LOAD '/user/bigdata/order.tbl' using PigStorage('|')
as
(ORDER_ID:int,ORDER_DATE:chararray,SHIP_VIA:int,SHIP_CITY:chararray,SHIP_REGION:chararray,SHIP_
POSTAL_CODE:chararray,SHIP_COUNTRY:chararray);
-- (1)
london = FILTER orders BY SHIP_CITY == 'London ';
londonGroup = Group london All;
londonCount = foreach londonGroup Generate COUNT(london);
dump londonCount;
(33)
-- (2)
orderJoin = join orders by ORDER_ID, order_detail by ORDER_ID;
not1996 = filter orderJoin by not(ORDER_DATE matches '.*1996.*');
getProductID = foreach not1996 generate order_detail::PRODUCT_ID;
distinctProduct = distinct getProductID;
productGroup = Group distinctProduct All;
productCount = foreach productGroup Generate COUNT(distinctProduct);
dump productCount;
(77)
-- (3)
```

```
orderFields = foreach order_detail generate ORDER_ID, UNIT_PRICE * QUANTITY as value;
distinctOrder = distinct orderFields;
filterOrderID = FILTER distinctOrder BY (ORDER_ID > 10269 AND ORDER_ID < 10280);
orderGroup = group filterOrderID by (ORDER_ID);
dump orderGroup;
orderSum = foreach orderGroup generate (filterOrderID.ORDER ID), SUM(filterOrderID.value) as
ordervalue;
dump orderSum;
((10270),(10270)),1376.0) ((10271)),48.0) ((10272),(10272),(10272)),1455.9999694824219)
({(10273),(10273),(10273),(10273)},2142.399932861328)
({(10274),(10274)},538.5999908447266) ({(10275),(10275)},307.1999969482422)
({(10276),(10276)},420.0) ({(10277),(10277)},1200.8000183105469)
({(10278),(10278),(10278),(10278)},1488.7999877929688)({(10279)},468.0)
-- (4)
getDetails = foreach order_detail generate SALESPERSON_ID, UNIT_PRICE, QUANTITY, UNIT_PRICE *
QUANTITY as ordervalue;
groupDetails = group getDetails by SALESPERSON_ID;
totalSales = foreach groupDetails generate group, SUM(getDetails.ordervalue) as totalOr derValue;
orderTotalSales = order totalSales by totalOrderValue desc;
top3 = limit orderTotalSales 3;
employeeTop3 = join top3 by group left outer, salesperson by EMPLOYEE_ID;
getTop3 = foreach employeeTop3 generate EMPLOYEE_ID, FIRSTNAME, LASTNAME;
dump getTop3;
(1, Nancy, Davolio)
(3, Janet, Leverling)
(4, Margaret, Peacock)
```

```
-- (5)
odxProduct = join order_detail by PRODUCT_ID, product by PRODUCT_ID;
filterTofulkura = filter odxProduct BY PRODUCT_NAME == 'Tofu ' OR PRODUCT_NAME == 'Ikura';
distinctTofulkura = distinct filterTofulkura;
TofulkuraGroup = Group distinctTofulkura All;
totalCount = foreach TofulkuraGroup Generate COUNT(distinctTofulkura);
dump totalCount;
(55)
```