

```
=====
1) orders = load '/bigdata/orders/orders.txt' using PigStorage(',') as
  (order_number:int, customer_number:int);

details = load '/bigdata/orders/details.txt' using PigStorage(',') as
  (order_number:int, line_number:int, item_name:chararray, quantity:int);

gt100 = filter details by quantity > 100;
gt100bolts = filter gt100 by item_name == 'bolt';
jointoorders = join gt100bolts by order_number, orders by order_number;
result = foreach jointoorders generate customer_number;
dump result;
```

```
2) nobolts = filter details by item_name != 'bolt'

leftoutertoorders = join nobolts by order_number leftouter, orders by order_number;
custwithnobolts = filter leftoutertoorders by order_number is null;
result = foreach custwithnobolts generate customer_number;
dump result;
```

- 3)
- ```
orderedbolt = filter details by item_name = 'bolt';
orderedscrew = filter details by item_name = 'screw';
joinscrewbolt = join orderedbolt by order_number, orderedscrew by order_number;
jointoorders = join joinscrewbolt by order_number, orders by order_number;
result = foreach jointoorders generate customer_number;
dump result;
```
- 4)
- ```
joinordersdetails = join details by order_number left outer, orders by order_number;  
grouped = group joinordersdetails all;  
summed = foreach grouped generate customer_number, count(order_number);  
result = DISTINCT summed;  
dump result;
```