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Assignment No : 10

(base) kj-comp@kjcomp-OptiPlex-380:~\$ mongo

```
> show dbs
admin    0.000GB
config  0.000GB
local    0.000GB
t3       0.000GB
test     0.000GB
> use t3
switched to db t3
> db.order.insert({ "Item_Name": "aaa", "price": 25 } )
WriteResult({ "nInserted" : 1 })
> db.order.insert({ "Item_Name": "aaa", "price": 15 } )
WriteResult({ "nInserted" : 1 })
> db.order.insert({ "Item_Name": "aaa", "price": 10 } )
WriteResult({ "nInserted" : 1 })
> db.order.insert({ "Item_Name": "bbb", "price": 14 } )
WriteResult({ "nInserted" : 1 })
> db.order.insert({ "Item_Name": "bbb", "price": 16 } )
WriteResult({ "nInserted" : 1 })
> db.order.insert({ "Item_Name": "ccc", "price": 26 } )
WriteResult({ "nInserted" : 1 })
> db.order.insert({ "Item_Name": "ccc", "price": 17 } )
WriteResult({ "nInserted" : 1 })
> var mapFunction1 = function() {
... emit(this.Item_Name, this.price);
... };

var reduceFunction1 =function(keyItemName,valuesPrices) {return
Array.sum(valuesPrices); };

> db.order.mapReduce( mapFunction1, reduceFunction1, { out:"itemstotalprice" } );

{ "result" : "itemstotalprice", "ok" : 1 }
> db.itemstotalprice.find()
{ "_id" : "ccc", "value" : 86 }
{ "_id" : "bbb", "value" : 60 }
{ "_id" : "aaa", "value" : 100 }

> var map2 = function() {
... emit(this.Item_Name,this.price);
... };

> var reduce2= function(name,
... values) { var total = 0;
... for (var index = 0; index < values.length; ++index)
... {total+= values[index];
... }
... return total/values.length;
```

```
... }
```

```
> db.order.mapReduce( map2,reduce2, { out: "avgprice" } )
{ "result" : "avgprice", "ok" : 1 }
> db.avgprice.find();
{ "_id" : "ccc", "value" : 21.5 }
{ "_id" : "bbb", "value" : 15 }
{ "_id" : "aaa", "value" : 16.666666666666668 }
> db.orders.insertMany([
... { _id: 1, cust_id: "Ant O. Knee", ord_date: new Date("2020-03-01"), price:
25, items: [ {
... sku: "oranges", qty: 5, price: 2.5 }, { sku: "apples", qty: 5, price: 2.5 }
], status: "A" },
... { _id: 2, cust_id: "Ant O. Knee", ord_date: new Date("2020-03-08"), price:
70, items: [ {
... sku: "oranges", qty: 8, price: 2.5 }, { sku: "chocolates", qty: 5, price: 10
} ], status: "A" },
... { _id: 3, cust_id: "Busby Bee", ord_date: new Date("2020-03-08"), price: 50,
items: [ { sku:
... "oranges", qty: 10, price: 2.5 }, { sku: "pears", qty: 10, price: 2.5 } ],
status: "A" },
... { _id: 4, cust_id: "Busby Bee", ord_date: new Date("2020-03-18"), price: 25,
items: [ { sku:
... "oranges", qty: 10, price: 2.5 } ], status: "A" },
... { _id: 5, cust_id: "Busby Bee", ord_date: new Date("2020-03-19"), price: 50,
items: [ { sku:
... "chocolates", qty: 5, price: 10 } ], status: "A"},
... { _id: 6, cust_id: "Cam Elot", ord_date: new Date("2020-03-19"), price: 35,
items: [ { sku:
... "carrots", qty: 10, price: 1.0 }, { sku: "apples", qty: 10, price: 2.5 } ],
status: "A" },
... { _id: 7, cust_id: "Cam Elot", ord_date: new Date("2020-03-20"), price: 25,
items: [ { sku:
... "oranges", qty: 10, price: 2.5 } ], status: "A" },
... { _id: 8, cust_id: "Don Quis", ord_date: new Date("2020-03-20"), price: 75,
items: [ { sku:"chocolates", qty: 5, price: 10 }, { sku: "apples", qty: 10,
price: 2.5 } ], status: "A" },
... { _id: 9, cust_id: "Don Quis", ord_date: new Date("2020-03-20"), price: 55,
items: [ { sku:
... "carrots", qty: 5, price: 1.0 }, { sku: "apples", qty: 10, price: 2.5 }, {
sku: "oranges", qty: 10,
... price: 2.5 } ], status: "A" },
... { _id: 10, cust_id: "Don Quis", ord_date: new Date("2020-03-23"), price: 25,
items: [ { sku:
... "oranges", qty: 10, price: 2.5 } ], status: "A" }
... ])
{
  "acknowledged" : true,
  "insertedIds" : [
    1,
    2,
    3,
    4,
    5,
```

```

        6,
        7,
        8,
        9,
        10
    ]
}
> var mapFunction1 = function() {
... .. emit(this.cust_id, this.price);
... .. };
> var reduceFunction1 = function(keyCustId, valuesPrices) {
... .. return Array.sum(valuesPrices);
... .. };
> db.orders.mapReduce(
... .. mapFunction1,
... .. reduceFunction1,
... .. { out: "map_reduce_example" }
... .. )
{ "result" : "map_reduce_example", "ok" : 1 }

> db.map_reduce_example.find().sort( { _id: 1 } )
{ "_id" : "Ant 0. Knee", "value" : 95 }
{ "_id" : "Busby Bee", "value" : 125 }
{ "_id" : "Cam Elot", "value" : 60 }
{ "_id" : "Don Quis", "value" : 155 }

> ^C
bye

```