```
1
     DBMSL Assignment No 11
2
3
4
5
     #Data:
6
7
         > db.orders.find().pretty()
8
9
              " id" : 1,
              "cust id" : "A1",
10
              "DOR": ISODate("2023-01-05T00:00:00Z"),
11
              "price" : 250,
12
              "items" : [
13
14
                  {
15
                       "sku" : "oranges",
                       "qty" : 5,
16
17
                       "price" : 10
18
                  },
19
                   {
20
                       "sku" : "apples",
21
                       "qty" : 5,
                       "price" : 10
22
23
                  }
24
              ],
              "status" : "P"
25
26
         }
27
         {
              " id" : 2,
28
29
              "cust id" : "A2",
30
              "DOR" : ISODate("2023-01-20T00:00:00Z"),
              "price" : 500,
31
              "items" : [
32
33
                  {
                       "sku" : "oranges",
34
                       "qty" : 10,
35
                       "price" : 10
36
37
                  },
38
39
                       "sku" : "apples",
                       "qty" : 10,
40
41
                       "price" : 10
42
                   }
43
              ],
44
              "status" : "P"
45
         }
46
         {
              " id" : 3,
47
              "cust id" : "A3",
48
              "DOR": ISODate("2023-01-25T00:00:00Z"),
49
50
              "price" : 500,
51
              "items" : [
52
                   {
53
                       "sku" : "oranges",
54
                       "qty" : 10,
55
                       "price" : 10
56
                  },
57
                   {
                       "sku" : "apples",
58
                       "qty" : 10,
59
60
                       "price" : 10
61
                   }
62
              ],
63
              "status" : "D"
64
         }
65
          {
              " id" : 4,
66
              "cust id" : "A4",
67
              "DOR": ISODate("2023-01-29T00:00:00Z"),
68
              "price" : 700,
69
```

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```
"items" : [
 71
 72
                       "sku" : "oranges",
 73
                       "qty" : 12,
 74
                       "price" : 25
                   },
 75
 76
                   {
 77
                       "sku" : "apples",
 78
                       "qty" : 10,
                       "price" : 10
 79
 80
                   }
 81
               ],
               "status" : "D"
 82
 83
          }
 84
 85
      1. Display total price per customer
 86
 87
          > var map=function(){emit(this.cust id,this.price);};
 88
 89
          > var reduce=function(cust id,price) {return Array.sum(price);};
 90
 91
          > db.orders.mapReduce(map, reduce, {out: 'result1'})
 92
          { "result" : "result1", "ok" : 1 }
 93
 94
          > db.result1.find()
          { " id" : "A3", "value" : 500 }
 95
          { "_id" : "A2", "value" : 500 } { "_id" : "A1", "value" : 250 }
 96
 97
          { "id" : "A4", "value" : 700 }
 98
 99
100
      2. Display total price per customer having status=D.
101
102
          > var map=function() {emit(this.cust id, this.price);};
103
          > var reduce=function(cust id,price) {return Array.sum(price);};
104
105
          > db.orders.mapReduce(map,reduce,{out:'result', query:{status:"D"}})
106
          { "result" : "result", "ok" : 1 }
107
108
          > db.result.find()
109
          { "_id" : "A3", "value" : 500 }
110
          { " id" : "A4", "value" : 700 }
111
112
      3. Display total price for status = 'P'.
113
114
          > var map=function(){emit(this.cust id,this.price);};
115
116
          > var reduce=function(cust id,price) {return Array.sum(price);};
117
118
          > db.orders.mapReduce(map,reduce,{out:'result2', query:{status:"P"}})
119
          { "result" : "result2", "ok" : 1 }
120
121
          > db.result2.find()
          { "_id" : "A2", "value" : 500 }
122
          { "id" : "A1", "value" : 250 }
123
124
125
      4. Finding count of all keys in orders collection.
126
127
          > var map=function() {for(var k in this) {emit(k, {count:1}));;;
128
129
          > var reduce=function(keys,count) {total=0;for(i in
          count) {total+=count[i].count}; return {countK:total};}
130
131
          > db.orders.mapReduce(map,reduce,{out:'new3'})
               { "result" : "new3", "ok" : 1 }
132
133
134
          > db.new3.find()
               { " id" : "DOR", "value" : { "countK" : 4 } }
135
               [ "id" : "cust id", "value" : { "countK" : 4 } ]
136
               { "id" : "id", "value" : { "countK" : 4 } }
137
```

```
138 { "_id" : "price", "value" : { "countK" : 4 } }
139 { "_id" : "status", "value" : { "countK" : 4 } }
140 { "_id" : "items", "value" : { "countK" : 4 } }
141
```