

DBMSL Assignment No 11

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Batch : T1

#Data:

```
> db.orders.find().pretty()
{
  "_id" : 1,
  "cust_id" : "A1",
  "DOR" : ISODate("2023-01-05T00:00:00Z"),
  "price" : 250,
  "items" : [
    {
      "sku" : "oranges",
      "qty" : 5,
      "price" : 10
    },
    {
      "sku" : "apples",
      "qty" : 5,
      "price" : 10
    }
  ],
  "status" : "P"
}
{
  "_id" : 2,
  "cust_id" : "A2",
  "DOR" : ISODate("2023-01-20T00:00:00Z"),
  "price" : 500,
  "items" : [
    {
      "sku" : "oranges",
      "qty" : 10,
      "price" : 10
    },
    {
      "sku" : "apples",
      "qty" : 10,
      "price" : 10
    }
  ],
  "status" : "P"
}
{
  "_id" : 3,
  "cust_id" : "A3",
  "DOR" : ISODate("2023-01-25T00:00:00Z"),
  "price" : 500,
```

```

    "items" : [
      {
        "sku" : "oranges",
        "qty" : 10,
        "price" : 10
      },
      {
        "sku" : "apples",
        "qty" : 10,
        "price" : 10
      }
    ],
    "status" : "D"
  }
}
{
  "_id" : 4,
  "cust_id" : "A4",
  "DOR" : ISODate("2023-01-29T00:00:00Z"),
  "price" : 700,
  "items" : [
    {
      "sku" : "oranges",
      "qty" : 12,
      "price" : 25
    },
    {
      "sku" : "apples",
      "qty" : 10,
      "price" : 10
    }
  ],
  "status" : "D"
}

```

1. Display total price per customer

```

> var map=function(){emit(this.cust_id,this.price)};;

> var reduce=function(cust_id,price){return
Array.sum(price)};;

> db.orders.mapReduce(map,reduce,{out:'result1'})
{ "result" : "result1", "ok" : 1 }

> db.result1.find()
{ "_id" : "A3", "value" : 500 }
{ "_id" : "A2", "value" : 500 }
{ "_id" : "A1", "value" : 250 }
{ "_id" : "A4", "value" : 700 }

```

2. Display total price per customer having status=D.

```
> var map=function(){emit(this.cust_id,this.price)};;
> var reduce=function(cust_id,price){return
Array.sum(price)};;

> db.orders.mapReduce(map,reduce,{out:'result',
query:{status:"D"}})
{ "result" : "result", "ok" : 1 }

> db.result.find()
{ "_id" : "A3", "value" : 500 }
{ "_id" : "A4", "value" : 700 }
```

3. Display total price for status ='P'.

```
> var map=function(){emit(this.cust_id,this.price)};;

> var reduce=function(cust_id,price){return
Array.sum(price)};;

> db.orders.mapReduce(map,reduce,{out:'result2',
query:{status:"P"}})
{ "result" : "result2", "ok" : 1 }

> db.result2.find()
{ "_id" : "A2", "value" : 500 }
{ "_id" : "A1", "value" : 250 }
```

4. Finding count of all keys in orders collection.

```
> var map=function(){for(var k in this){emit(k,{count:1})}};;

> var reduce=function(keys,count){total=0;for(i in
count){total+=count[i].count};return {countK:total}};

> db.orders.mapReduce(map,reduce,{out:'new3'})
{ "result" : "new3", "ok" : 1 }

> db.new3.find()
{ "_id" : "DOR", "value" : { "countK" : 4 } }
{ "_id" : "cust_id", "value" : { "countK" : 4 } }
{ "_id" : "_id", "value" : { "countK" : 4 } }
{ "_id" : "price", "value" : { "countK" : 4 } }
{ "_id" : "status", "value" : { "countK" : 4 } }
{ "_id" : "items", "value" : { "countK" : 4 } }
```