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ASSIGNMENT 12

- **CREATING DATABASES AND COLLECTION:**

```
> show databases;
admin      0.000GB
assign10   0.000GB
assign11   0.000GB
assign9    0.000GB
config     0.000GB
local      0.000GB
> use assign12
switched to db assign12
> db.createCollection("cust_orders")
{ "ok" : 1 }
```

- **INSERTING VALUES IN THE COLLECTION:**

```
> db.cust_orders.insert({cust_id:101,Amount:300,Status:"Paid",City:"Pune"})
WriteResult({ "nInserted" : 1 })
> db.cust_orders.insert({cust_id:101,Amount:500,Status:"Paid",City:"Pune"})
WriteResult({ "nInserted" : 1 })
> db.cust_orders.insert({cust_id:102,Amount:400,Status:"Not_Paid",City:"Mumbai"})
WriteResult({ "nInserted" : 1 })
> db.cust_orders.insert({cust_id:103,Amount:450,Status:"Paid",City:"Mumbai"})
WriteResult({ "nInserted" : 1 })
> db.cust_orders.insert({cust_id:101,Amount:200,Status:"Not_Paid",City:"Pune"})
WriteResult({ "nInserted" : 1 })
> db.cust_orders.insert({cust_id:103,Amount:900,Status:"Paid",City:"Mumbai"})
WriteResult({ "nInserted" : 1 })
> db.cust_orders.find().pretty()
```

- **Displaying:**

```
> db.cust_orders.find().pretty()
{
        "_id" : ObjectId("5fbd18db62fe6431a2fafd26"),
        "cust_id" : 101,
        "Amount" : 300,
        "Status" : "Paid",
        "City" : "Pune"
}
{
        "_id" : ObjectId("5fbd18e662fe6431a2fafd27"),
        "cust_id" : 101,
        "Amount" : 500,
        "Status" : "Paid",
        "City" : "Pune"
}
{
        "_id" : ObjectId("5fbd191f62fe6431a2fafd28"),
        "cust_id" : 102,
        "Amount" : 400,
        "Status" : "Not_Paid",
        "City" : "Mumbai"
}
{
        "_id" : ObjectId("5fbd193162fe6431a2fafd29"),
        "cust_id" : 103,
        "Amount" : 450,
        "Status" : "Paid",
        "City" : "Mumbai"
}
{
        "_id" : ObjectId("5fbd195362fe6431a2fafd2a"),
        "cust_id" : 101,
        "Amount" : 200,
        "Status" : "Not_Paid",
        "City" : "Pune"
}
{
        "_id" : ObjectId("5fbd197062fe6431a2fafd2b"),
        "cust_id" : 103,
        "Amount" : 900,
        "Status" : "Paid",
        "City" : "Mumbai"
}
>
```

- **Map Reduce:**

Method1:

1)Displaying total amount paid by a customer:-

```
> db.cust_orders.mapReduce(function(){emit(this.cust_id,this.Amount);},function(key,values){return
Array.sum(values)},{query:{"Status":"Paid"},out:"total_paid"})
```

```
{ "result" : "total_paid", "ok" : 1 }
> db.total_paid.find()
{ "_id" : 101, "value" : 800 }
```

{ "_id" : 103, "value" : 1350 }
>

```
> db.cust_orders.mapReduce(function(){emit(this.cust_id,this.Amount);},function(key,values){return Array.sum(values)},{query:{"Status":"Paid"},out:"total_paid"})
{ "result" : "total_paid", "ok" : 1 }
> db.total_paid.find()
{ "_id" : 101, "value" : 800 }
{ "_id" : 103, "value" : 1350 }
>
```

Method2:

2) Displaying total amount shopping done by a customer:-

> var mapfun1 = function(){emit(this.cust_id,this.Amount);};
> var reducefun1 = function(key,values){return Array.sum(values);};
> db.cust_orders.mapReduce(mapfun1,reducefun1,{out:"total_amount"})
{ "result" : "total_amount", "ok" : 1 }
> db.total_amount.find()
{ "_id" : 102, "value" : 400 }
{ "_id" : 103, "value" : 1350 }
{ "_id" : 101, "value" : 1000 }

```
> var mapfun1 = function(){emit(this.cust_id,this.Amount);};
> var reducefun1 = function(key,values){return Array.sum(values);};
> db.cust_orders.mapReduce(mapfun1,reducefun1,{out:"total_amount"})
{ "result" : "total_amount", "ok" : 1 }
> db.total_amount.find()
{ "_id" : 102, "value" : 400 }
{ "_id" : 103, "value" : 1350 }
{ "_id" : 101, "value" : 1000 }
>
```

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