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Group C: Assignment No. 15

- Aim:
Implement map reduces operation with suitable example on above mongoDB database.

- Objective:
To understand the concept of mapreduce in mongoDB
To implement the concept of document oriented databases

- Theory:

- 1) Implements the mapreduce model for processing large data sets.
- 2) Can choose from one of several output options
- 3) mapreduce functions are written in JavaScript
- 4) Supports a non-shared and shared input collections

→ db.createCollection("order")
{ "ok": 1 }

→ db.order.insert({ cust-id: "A123", amount: 500, status: "A"},
{ cust-id: "A123", amount: 250, status: "A" })

map function

```
Var mapfunction1 = function()
{ emit (this.cust-id, this amount); }
```


Reduce Function

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We reducefunction1 = function (key, value)
 { return Array, sum(values); };

→ db.order.mapReduce (mapfunction1, reducefunction1, { query:
 { status: "A" }, out: "order-totals" });

→ db.order.mapReduce (map function → function() { emit (this.cust-id,
 this.amount); };

Reduce function → function (key, value) { return array.sum(values) },
 query a { query: { status: "A" } },
 output collection a out: "order-totals" }

→ db.<collection name>.find();
 db.order-totals.find()

Conclusion :

By performing this, its easy to understand to
 mapReduce operation in mongodb.