

ASSIGNMENT NO:11

PROBLEM STATEMENT: MongoDB – Map-reduces operations: Implement Map reduces operation with suitable example using MongoDB.

```
gescoe@gescoe-OptiPlex-3010:~$ mongo
MongoDB shell version: 2.6.12
connecting to: test
```

```
> use TEB_39;
switched to db TEB_39
```

```
> db.Record.insert({"Branch":"Computer","Marks":950,"Division":"B"});
WriteResult({ "nInserted" : 1 })
> db.Record.insert({"Branch":"Computer","Marks":700,"Division":"B"});
WriteResult({ "nInserted" : 1 })
> db.Record.insert({"Branch":"AIDS","Marks":820,"Division":"A"});
WriteResult({ "nInserted" : 1 })
> db.Record.insert({"Branch":"AIDS","Marks":650,"Division":"B"});
WriteResult({ "nInserted" : 1 })
```

```
> db.Record.find().pretty();
{
  "_id" : ObjectId("66f12b91e8870de812a53430"),
  "Branch" : "Computer",
  "Marks" : 950,
  "Division" : "B"
}
{
  "_id" : ObjectId("66f12bb4e8870de812a53431"),
  "Branch" : "Computer",
  "Marks" : 700,
  "Division" : "B"
}
{
  "_id" : ObjectId("66f12bcce8870de812a53432"),
  "Branch" : "AIDS",
  "Marks" : 820,
  "Division" : "A"
}
{
  "_id" : ObjectId("66f12be8e8870de812a53433"),
  "Branch" : "AIDS",
  "Marks" : 650,
  "Division" : "B"
}
```

```

> db.Record.mapReduce(function(){emit(this.Branch, this.Marks);},
... function(key, values) {return Array.sum( values)},
... { query : {Division : "B"},
    out : "Total_marks"
... }
... );
{
  "result" : "Total_marks",
  "timeMillis" : 87,
  "counts" : {
    "input" : 3,
    "emit" : 3,
    "reduce" : 1,
    "output" : 2
  },
  "ok" : 1
}

```

```

> show collections;
Record
Student
Total_marks
System.indexes

```

```

> db.Total_marks.find().pretty();
{ "_id" : "AIDS", "value" : 650 }
{ "_id" : "Computer", "value" : 1650 }
>

```