

Database Management System Laboratory
Name:-NISHA Assignment No:-11 Roll No:-3334

```
> use 3334new
switched to db 3334new
>
db.student.insert([{name:"nisha",age:"19",branch:"comp-a",rollno:"3334",marks:96},{name:"ab
hay",age:"20",branch:"comp-b",rollno:"3302",marks:90},{name:"aadarsh",age:"21",branch:"it",
rollno:"3301",marks:80}]);
BulkWriteResult({
  "writeErrors" : [ ],
  "writeConcernErrors" : [ ],
  "nInserted" : 3,
  "nUpserted" : 0,
  "nMatched" : 0,
  "nModified" : 0,
  "nRemoved" : 0,
  "upserted" : [ ]
})
>
db.student.insert([{name:"raj",age:"19",branch:"comp-a",rollno:"3334",marks:95},{name:"rahu
",age:"20",branch:"comp-b",rollno:"3302",marks:99},{name:"pankaj",age:"21",branch:"it",rol
lno:"3301",marks:89}]);
BulkWriteResult({
  "writeErrors" : [ ],
  "writeConcernErrors" : [ ],
  "nInserted" : 3,
  "nUpserted" : 0,
  "nMatched" : 0,
  "nModified" : 0,
  "nRemoved" : 0,
  "upserted" : [ ]
})
>
db.student.insert([{name:"manish",age:"19",branch:"comp-a",rollno:"3334",marks:97},{name:"k
artik",age:"20",branch:"comp-b",rollno:"3302",marks:98},{name:"ajay",age:"21",branch:"it",r
ollno:"3301",marks:85}]);
BulkWriteResult({
  "writeErrors" : [ ],
  "writeConcernErrors" : [ ],
  "nInserted" : 3,
  "nUpserted" : 0,
  "nMatched" : 0,
  "nModified" : 0,
  "nRemoved" : 0,
  "upserted" : [ ]
})
>
db.student.insert([{name:"divya",age:"19",branch:"comp-a",rollno:"3334",marks:92},{name:"hi
manshu",age:"20",branch:"comp-b",rollno:"3302",marks:91},{name:"harshit",age:"21",branch:"i
t",rollno:"3301",marks:83}]);
BulkWriteResult({
  "writeErrors" : [ ],
  "writeConcernErrors" : [ ],
  "nInserted" : 3,
```

```

    "nUpserted" : 0,
    "nMatched" : 0,
    "nModified" : 0,
    "nRemoved" : 0,
    "upserted" : [ ]
  })
  > var map = function(){ emit (this.branch,this.marks)};
  > var reduce1 = function(branch,marks){ return Array.sum(marks)};
  > var reduce = function(branch,marks){ return Array.avg(marks)};
  > db.student.mapReduce(map,reduce1,{out:"resultcollection"});
  {
    "result" : "resultcollection",
    "timeMillis" : 510,
    "counts" : {
      "input" : 12,
      "emit" : 12,
      "reduce" : 3,
      "output" : 3
    },
    "ok" : 1
  }
  > db.resultcollection.find();
  { "_id" : "comp-a", "value" : 380 }
  { "_id" : "comp-b", "value" : 378 }
  { "_id" : "it", "value" : 337 }
  > db.student.mapReduce(map,reduce,{out:"resultcollection"});
  {
    "result" : "resultcollection",
    "timeMillis" : 383,
    "counts" : {
      "input" : 12,
      "emit" : 12,
      "reduce" : 3,
      "output" : 3
    },
    "ok" : 1
  }
  > db.resultcollection.find();
  { "_id" : "comp-a", "value" : 95 }
  { "_id" : "comp-b", "value" : 94.5 }
  { "_id" : "it", "value" : 84.25 }

```