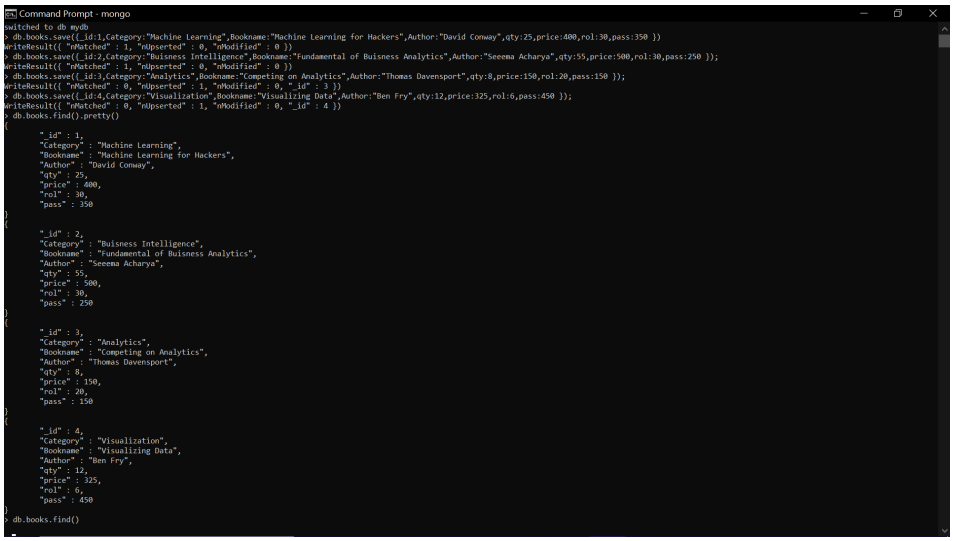
Assignment 1

```
use mydb;
db.books.save({_id:1,Category:"Machine Learning",Bookname:"Machine Learning for Hackers",Author:"David Conway",qty:25,price:400,rol:30,pages:350 });
db.books.save({_id:2,Category:"Buisness Intelligence",Bookname:"Fundamental of Buisness Analytics",Author:"Seeema Acharya",qty:55,price:500,rol:30,pages:250 });
db.books.save({_id:3,Category:"Analytics",Bookname:"Competing on Analytics",Author:"Thomas Davensport",qty:8,price:150,rol:20,pages:150 });
WriteResult({ "nMatched" : 0, "nUpserted" : 1, "nModified" : 0, "_id" : 3 })
db.books.save({_id:4,Category:"Visualization",Bookname:"Visualizing Data",Author:"Ben Fry",qty:12,price:325,rol:6,pages:450 });
db.books.save({_id:5,Category:"Web Mining",Bookname:"Learning R",Author:"Richard C",qty:55,price:850,rol:10,pages:120 });
```

STEP 1-

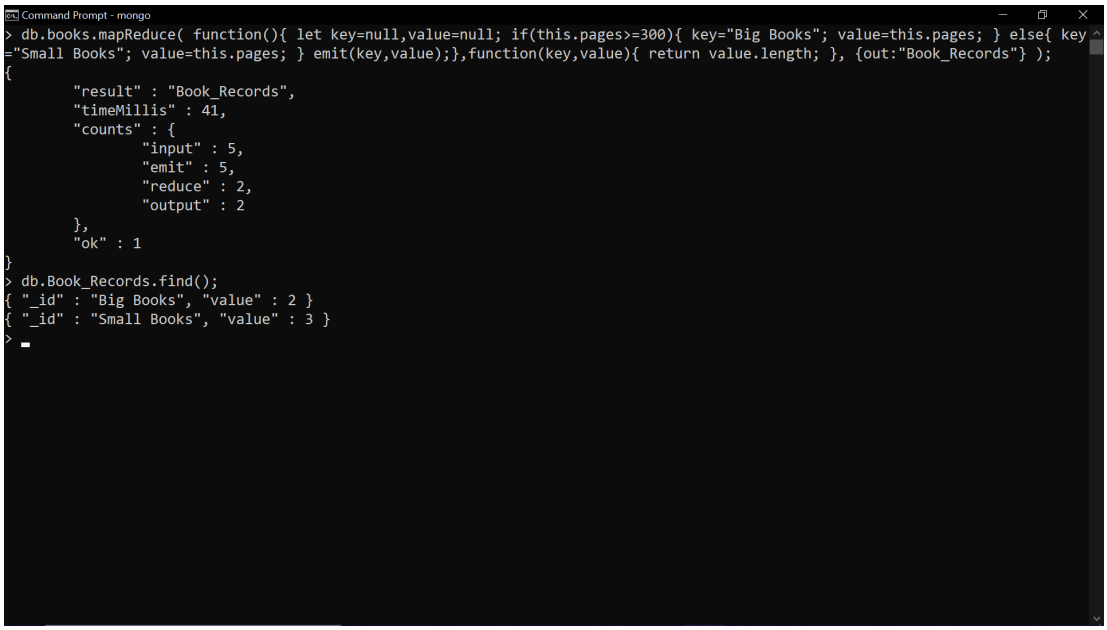


STEP 2-

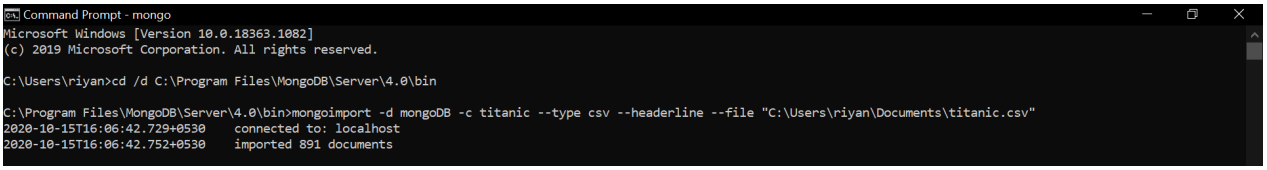
STEP 3&4&5;

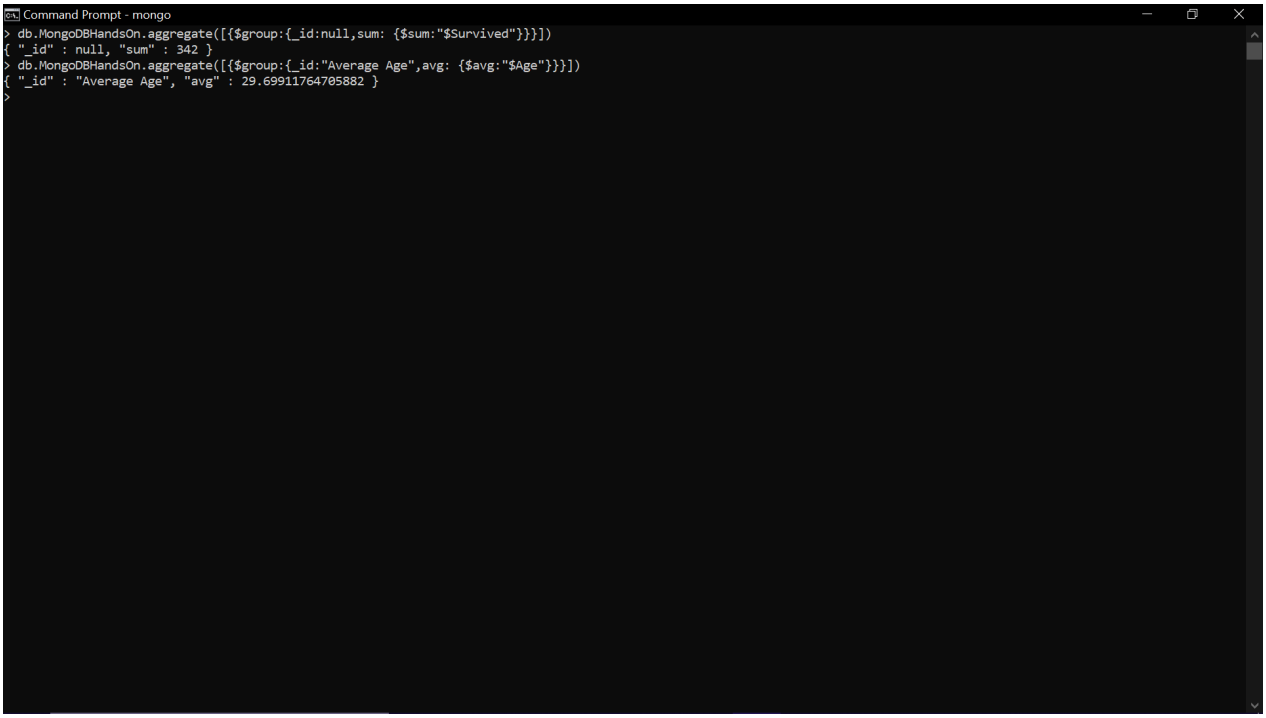
```
db.books.mapReduce( function()
{let key=null,value=null;
   if(this.pages>=300)
      {
         key="Big Books";
```

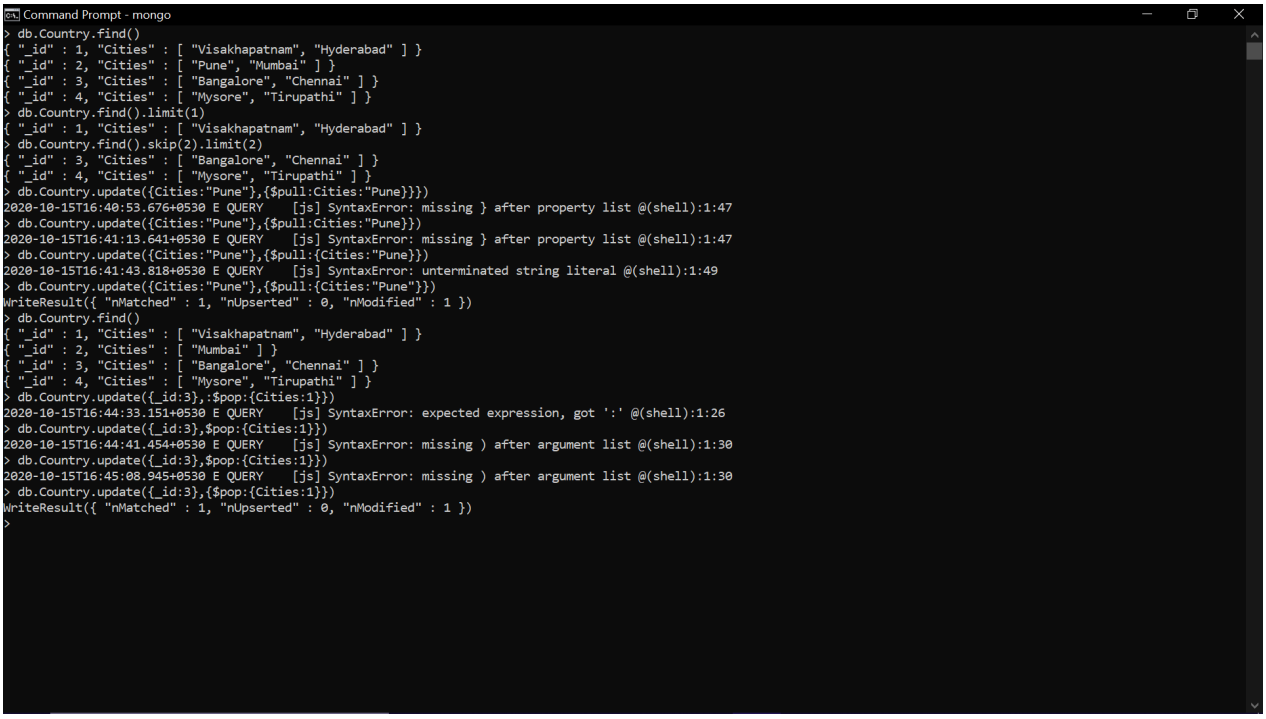
```
        value=this.pages;

        }
     else{
        key="Small Books";
        value=this.pages;
        }
    emit(key,value);
        },
        function(key,value)
        { return value.length;
           },
       {
              out:"Book_Records"}
              );
```



Assignment 2




Command Prompt - mongo
> db.MongoDBHandsOn.aggregate([{$group:{_id:null,sum: {$sum:"$Survived"}}}])
{ "_id" : null, "sum" : 342 }
> db.MongoDBHandsOn.aggregate([{$group:{_id:"Average Age",avg: {$avg:"$Age"}}}])
{ "_id" : "Average Age", "avg" : 29.69911764705882 }
>


Command Prompt - mongo
> db.Country.find()
{ "_id" : 1, "Cities" : ["Visakhapatnam", "Hyderabad"] }
{ "_id" : 2, "Cities" : ["Pune", "Mumbai"] }
{ "_id" : 3, "Cities" : ["Bangalore", "Chennai"] }
{ "_id" : 4, "Cities" : ["Mysore", "Tirupathi"] }
> db.Country.find().limit(1)
{ "_id" : 1, "Cities" : ["Visakhapatnam", "Hyderabad"] }
> db.Country.find().skip(2).limit(2)
{ "_id" : 3, "Cities" : ["Bangalore", "Chennai"] }
{ "_id" : 4, "Cities" : ["Mysore", "Tirupathi"] }
> db.Country.update({Cities:"Pune"},{$pull:Cities:"Pune"}})
2020-10-15T16:40:53.676+0530 E QUERY [js] SyntaxError: missing } after property list @(shell):1:47
> db.Country.update({Cities:"Pune"},{$pull:Cities:"Pune"})
2020-10-15T16:41:13.641+0530 E QUERY [js] SyntaxError: missing } after property list @(shell):1:47
> db.Country.update({Cities:"Pune"},{$pull:{Cities:"Pune}})
2020-10-15T16:41:43.818+0530 E QUERY [js] SyntaxError: unterminated string literal @(shell):1:49
> db.Country.update({Cities:"Pune"},{$pull:{Cities:"Pune"}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.Country.find()
{ "_id" : 1, "Cities" : ["Visakhapatnam", "Hyderabad"] }
{ "_id" : 2, "Cities" : ["Mumbai"] }
{ "_id" : 3, "Cities" : ["Bangalore", "Chennai"] }
{ "_id" : 4, "Cities" : ["Mysore", "Tirupathi"] }
> db.Country.update({_id:3},:$pop:{Cities:1}})
2020-10-15T16:44:33.151+0530 E QUERY [js] SyntaxError: expected expression, got ':' @(shell):1:26
> db.Country.update({_id:3},$pop:{Cities:1}})
2020-10-15T16:44:41.454+0530 E QUERY [js] SyntaxError: missing) after argument list @(shell):1:30
> db.Country.update({_id:3},$pop:{Cities:1}})
2020-10-15T16:45:08.945+0530 E QUERY [js] SyntaxError: missing) after argument list @(shell):1:30
> db.Country.update({_id:3},{$pop:{Cities:1}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
>


Command Prompt - mongo
> db.Country.update({_id:1},{$set:{'Cities:2':'Srinagar'}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.Country.find()
{ "_id" : 1, "Cities" : ["Visakhapatnam", "Hyderabad"], "Cities:2" : "Srinagar" }
{ "_id" : 2, "Cities" : ["Mumbai"] }
{ "_id" : 3, "Cities" : ["Bangalore"] }
{ "_id" : 4, "Cities" : ["Mysore", "Tirupathi"] }
> db.Country.update({_id:2},{$addToSet:{Cities:"Jaipur"}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.Country.find()
{ "_id" : 1, "Cities" : ["Visakhapatnam", "Hyderabad"], "Cities:2" : "Srinagar" }
{ "_id" : 2, "Cities" : ["Mumbai", "Jaipur"] }
{ "_id" : 3, "Cities" : ["Bangalore"] }
{ "_id" : 4, "Cities" : ["Mysore", "Tirupathi"] }
>