

Assignment 8

```
import java.io.*; import
java.util.Scanner; import java.sql.*;
public class
TECOC342_Assignment11_Code{ pu
blic void Display(){ try{
Class.forName("com.mysql.jdbc.Driv
er"); Connection con =
DriverManager.getConnection("jdbc:
mysql://localhost:3306/
TECOC342_Assignment11_Code","re
dhat", "redhat");
Statement
st=con.createStatement(); ResultSet
rs=st.executeQuery("select * from
Student_Data");
while(rs.next())
System.out.println(rs.getInt(1)+"
"+rs.getString(2)+" "+rs.getInt(3)+"
"+rs.getString(4)); con.close();
}
catch(Exception e)
{ System.out.println(e);
} }
public void Insert(int i1,String nm,int
i2,String ct){ try{
Class.forName("com.mysql.jdbc.Driv
er"); Connection con =
DriverManager.getConnection("jdbc:
mysql://localhost:3306/
TECOC342_Assignment11_Code","ro
ot","root1234");PreparedStatement
pstmt =
con.prepareStatement("insert into
Student_Data values(?,?,?,?)");
pstmt.setInt(1,i1);
pstmt.setString(2,nm);
pstmt.setInt(3,i2);
pstmt.setString(4,ct);
int i = pstmt.executeUpdate();
con.close();
}
catch (Exception e){
System.out.println(e);
}
}
public void delete(int i){
try{
Class.forName("com.mysql.jdbc.Driv
er");
```

```
Connection con
=DriverManager.getConnection("jdbc:
:mysql://localhost:3306/
TECOC342_Assignment11_Code","ro
ot","
root1234");
PreparedStatement pstmt =
con.prepareStatement("delete from
Student_Data where
Student_Id=?");
pstmt.setInt(1,i);
int k =pstmt.executeUpdate();
con.close();
}
catch(Exception e){
System.out.println(e);
}}
public void Update(String name, int i)
{
try{
Class.forName("com.mysql.jdbc.Driv
er");
Connection con =
DriverManager.getConnection("jdbc:
mysql://localhost:3306/
TECOC342_Assignment11_Code","ro
ot","r
oot1234");
PreparedStatement
pstmt=con.prepareStatement("updat
e Student_Data set Student_Name=?
where Student_Id=?");
pstmt.setString(1,name);
pstmt.setInt(2,i);
int k =pstmt.executeUpdate();
con.close();
}
catch(Exception e){
System.out.println(e);
}
}
public static void main(String[] args)
throws Exception{
Scanner sc= new
Scanner(System.in);
TECOC342_Assignment11_Code
obj1= new
TECOC342_Assignment11_Code();
int ch;
String n1,c1;
```

```

int id1,id2;
do{
System.out.println("*****JDBC-
MySQL Connected*****");
System.out.println("List of
operations:");
System.out.println(" 1.Display all
Records");System.out.println("
2.Insert new Record");
System.out.println(" 3.Update a
Record");
System.out.println(" 4.Delete a
Record");
System.out.println(" 5.Exit");
System.out.println("");
System.out.println(" Enter your
Choice");
ch=sc.nextInt();
switch(ch){
case 1:
obj1.Display();
break;
case 2:
System.out.println("Enter Student Id:
");
id1=sc.nextInt();
System.out.println("Enter Student
Name: ");
n1=sc.next();
System.out.println("Enter Instructor
Id: ");
id2=sc.nextInt();
System.out.println("Enter Student
City: ");
c1=sc.next();
obj1.Insert(id1,n1,id2,c1);
break;
case 3:
System.out.println("Enter Student Id:
");
int stid = sc.nextInt();
System.out.println("Enter Student
name: ");obj1.Update("harry",stid);
break;
case 4:
System.out.println("Enter id of
student to delete :"); int sid =
sc.nextInt(); obj1.delete(sid); break;
} }while(ch!=5); } }

```

*****JDBC-MySQL Connected*****

List of operations:

1. Display all Records
2. Insert new Record
3. Update a Record
4. Delete a Record
5. Exit

Enter your Choice

1

1 John Doe 1 New York

2 Jane Smith 2 Los Angeles

3 Alice Johnson 3 Chicago

*****JDBC-MySQL Connected*****

List of operations:

1. Display all Records
2. Insert new Record
3. Update a Record
4. Delete a Record
5. Exit

Enter your Choice

2

Enter Student Id:

4

Enter Student Name:

Eva Green

Enter Instructor Id:

4

Enter Student City:

San Francisco

*****JDBC-MySQL Connected*****

List of operations:

1. Display all Records
2. Insert new Record
3. Update a Record
4. Delete a Record
5. Exit

Enter your Choice

1

1 John Doe 1 New York

2 Jane Smith 2 Los Angeles

3 Alice Johnson 3 Chicago

4 Eva Green 4 San Francisco

*****JDBC-MySQL Connected*****

Assignment 9

```
COLLECTION NAME: Zipcode
db.createCollection("Zipcode")
db.Zipcode.insert({"_id" :
"10280" ,"city" : "New York" ,"state" :
"NY" ,"pop" : "5574000" } )
db.Zipcode.insert({"_id" :
10457 ,"city" : "Mumbai" ,"state": "Ma
harashtra", "pop" : 12400000})
db.Zipcode.insert({"_id" :
90503 ,"city" : " Los
Angeles" ,"state": " California", "pop" :
33871648})
db.Zipcode.insert({"_id" :
05201 ,"city" : " London" ,"state": "
England", "pop" : 9002488})
db.Zipcode.insert({"_id" :
35001 ,"city" : " Jaisalmer" ,"state": "
Rajasthan", "pop" : 318284})
db.Zipcode.insert({"_id" : 04054 ,"city
" : " Wells" ,"state": "
England", "pop" : 12000})
db.Zipcode.find().pretty()
{ "_id" : 10280, "city" : "New York",
"state" : "NY", "pop" : 5574000 } {
"_id" : 10457, "city" : "Mumbai",
"state" : "Maharashtra", "pop" :
12400000
} {
"_id" : 90503, "city" : " Los Angeles",
"state" : "California", "pop" :
33871648
} { "_id" : 2689, "city" : " London",
"state" : "England", "pop" :
9002488 } {
"_id" : 35001, "city" : "
Jaisalmer", "state" : " Rajasthan",
"pop" : 318284
}
{ "_id" : 2092, "city" : " Wells",
"state" : " England", "pop" : 12000 }
COLLECTION NAME: emp
db.createCollection("emp")
Values:
db.emp.insert({"emp_id":10245,"em
p_name":"Anahita","dept_no":1005,"
salary":120000})
db.emp.insert({"emp_id":10984,"em
p_name":"Aditi","dept_no":1007,"sala
ry":80000})
```

```
db.emp.insert({"emp_id":10354,"em
p_name":"Seema","dept_no":1005,"s
alary":65000})
db.emp.insert({"emp_id":12608,"em
p_name":"Saumya","dept_no":1009,"
salary":45000})
db.emp.insert({"emp_id":17089,"em
p_name":"Nitin","dept_no":1007,"sal
ary":97000})
db.emp.insert({"emp_id":10678,"em
p_name":"Deepa","dept_no":1005,"s
alary":85000})
db.emp.insert({"emp_id":17042,"em
p_name":"Manish","dept_no":1007,"s
alary":80000})
db.emp.insert({"emp_id":13602,"em
p_name":"Shilpa","dept_no":1003,"sa
lary":15000})
db.emp.insert({"emp_id":19047,"em
p_name":"Mohit","dept_no":1009,"sal
ary":75000})
db.emp.insert({"emp_id":10226,"em
p_name":"Sakshi","dept_no":1003,"s
alary": 12000})
db.emp.insert({"emp_id":13022,"em
p_name":"Ragini","dept_no":1003,"sa
lary":18000})
db.emp.insert({"emp_id":145681,"e
mp_name":"Ramesh","dept_no":1005
,"salary":10000})
> db.emp.find().pretty()
{
  "_id" :
  ObjectId("61628be378a48b543903cb
7d"),
  "emp_id" : 10245,
  "emp_name" : "Anahita",
  "dept_no" : 1005,
  "salary" : 120000
}{
  "_id" :
  ObjectId("61628bee78a48b543903cb
7e"),
  "emp_id" : 10984,
  "emp_name" : "Aditi",
  "dept_no" : 1007,
  "salary" : 80000
}
{
```

```

    "_id" :
    ObjectId("61628bef78a48b543903cb
7f"),
    "emp_id" : 10354,
    "emp_name" : "Seema",
    "dept_no" : 1005,
    "salary" : 65000
  }
  {
    "_id" :
    ObjectId("61628bfc78a48b543903cb
80"),
    "emp_id" : 12608,
    "emp_name" : "Saumya",
    "dept_no" : 1009,
    "salary" : 45000
  }
  {
    "_id" :
    ObjectId("61628bfc78a48b543903cb
81"),
    "emp_id" : 17089,
    "emp_name" : "Nitin",
    "dept_no" : 1007,
    "salary" : 97000
  }
  { "_id" :
    ObjectId("61628bfc78a48b543903cb
82"),
    "emp_id" : 10678,
    "emp_name" : "Deepa",
    "dept_no" : 1005,
    "salary" : 85000
  }
  {
    "_id" :
    ObjectId("61628bfc78a48b543903cb
83"),
    "emp_id" : 17042,
    "emp_name" : "Manish",
    "dept_no" : 1007,
    "salary" : 80000
  }
  {
    "_id" :
    ObjectId("61628bfc78a48b543903cb
84"),
    "emp_id" : 13602,
    "emp_name" : "Shilpa",
    "dept_no" : 1003,

```

```

    "salary" : 15000
  }
  {
    "_id" :
    ObjectId("61628bfc78a48b543903cb
85"),
    "emp_id" : 19047,
    "emp_name" : "Mohit",
    "dept_no" : 1009,
    "salary" : 75000
  }
  {
    "_id" :
    ObjectId("61628bfc78a48b543903cb
86"), "emp_id" : 10226,
    "emp_name" : "Sakshi",
    "dept_no" : 1003,
    "salary" : 12000
  }
  {
    "_id" :
    ObjectId("61628bfe78a48b543903cb
87"),
    "emp_id" : 13022,
    "emp_name" : "Ragini",
    "dept_no" : 1003,
    "salary" : 18000
  }
  COLLECTION NAME: student
  db.createCollection("student")
  db.student.insert({"st_id":1023670,"
st_roll":1,"st_dept":"Comp","year":"F
E","div":"A"})
  db.student.insert({"st_id":2023451,"
st_roll":2,"st_dept":"Comp","year":"S
E","div":"B"})
  db.student.insert({"st_id":3059672,"
st_roll":3,"st_dept":"Comp","year":"T
E","div":"C"})
  db.student.insert({"st_id":1043675,"
st_roll":5,"st_dept":"IT","year":"SE","d
iv":"A"})
  db.student.insert({"st_id":1032674,"
st_roll":4,"st_dept":"IT","year":"FE","d
iv":"B"})
  db.student.insert({"st_id":3043676,"
st_roll":6,"st_dept":"IT","year":"TE","d
iv":"B"})
  > db.student.find().pretty()
  {

```

```
"_id" :
ObjectId("616291b578a48b543903c
b88"),
"st_id" : 1023670,
"st_roll" : 1,
"st_dept" : "Comp","year" : "FE",
"div" : "A"
}
{
"_id" :
ObjectId("616291b578a48b543903c
b89"),
"st_id" : 2023451,
"st_roll" : 2,
"st_dept" : "Comp",
"year" : "SE",
"div" : "B"
}
{
"_id" :
ObjectId("616291b578a48b543903c
b8a"),
"st_id" : 3059672,
"st_roll" : 3,
"st_dept" : "Comp",
"year" : "TE",
"div" : "C"
}
{
"_id" :
ObjectId("616291b578a48b543903c
b8b"),
"st_id" : 1043675,
"st_roll" : 5,
"st_dept" : "IT",
"year" : "SE",
"div" : "A"
}
{
"_id" :
ObjectId("616291b578a48b543903c
b8c"),"st_id" : 1032674,
"st_roll" : 4,
"st_dept" : "IT",
"year" : "FE",
"div" : "B"
}
{
```

```
"_id" :
ObjectId("616291b578a48b543903c
b8d"),
"st_id" : 3043676,
"st_roll" : 6,
"st_dept" : "IT",
"year" : "TE",
"div" : "B"
}
{
"_id" :
ObjectId("61a30992c5e79250168fb9
9e"),
"st_id" : 1023670,
"st_roll" : 1,
"st_dept" : "Comp",
"year" : "FE",
"div" : "A"
}
{
"_id" :
ObjectId("61a30992c5e79250168fb9
9f"),
"st_id" : 2023451,
"st_roll" : 2,
"st_dept" : "Comp",
"year" : "SE",
"div" : "B"}
{
"_id" :
ObjectId("61a30992c5e79250168fb9
a0"),
"st_id" : 3059672,
"st_roll" : 3,
"st_dept" : "Comp",
"year" : "TE",
"div" : "C"
}
{
"_id" :
ObjectId("61a30992c5e79250168fb9
a1"),
"st_id" : 1043675,
"st_roll" : 5,
"st_dept" : "IT",
"year" : "SE",
"div" : "A"
}
{
```

```
"_id" :  
ObjectId("61a30992c5e79250168fb9  
a2"),  
"st_id" : 1032674,  
"st_roll" : 4,  
"st_dept" : "IT",  
"year" : "FE",  
"div" : "B"  
}  
1.  
db.Zipcode.find({pop: {$gt:  
10000000}}).pretty()2.  
db.emp.aggregate([ {$group:  
{"_id":"$dept_no",Avg_salary:  
{$avg:"$salary"}}}  
]) 3.  
db.emp.aggregate([ {$group:  
{"_id":"$dept_no",NO_of_emp:  
{$sum:1}}}  
])
```

Assignment 12

```
import
java.net.UnknownHostException;
import java.util.Scanner;
import com.mongodb.*;
public class DatabaseConnectivity {
private static void choice_input(){
System.out.println("\n1.insert data
into database\n2.update
database
documents\n3.delete database
documents\n4.show database
collections\n5.Exit");
}
public static void main(String[] args)
{
String key, value;
Scanner scanner = new
Scanner(System.in);
int choice;
try {
Mongo mongo = new
Mongo("localhost", 27017);
DB db = mongo.getDB("myDb");
DBCollection collection =
db.getCollection("dummyColl");
do{
choice_input();
System.out.println("Enter your
choice: ");
choice = scanner.nextInt();switch
(choice){
case 1:
BasicDBObject document = new
BasicDBObject();
String ch;
do{
System.out.println("Enter key: ");
key = scanner.next();
System.out.println("Enter value: ");
value = scanner.next();
document.put(key, value);
System.out.println("Do you want to
enter more(y/n)? ");
ch = scanner.next();
} while (!ch.equals("n"));
collection.insert(document);
break;
case 2:
BasicDBObject searchObj = new
BasicDBObject();
```

```
System.out.println("Enter searched
key: ");
key = scanner.next();
System.out.println("Enter searched
value: ");
value = scanner.next();
searchObj.put(key, value);
BasicDBObject newObj = new
BasicDBObject();
System.out.println("Enter new key:
");
key = scanner.next();
System.out.println("Enter new value:
");
value = scanner.next();
newObj.put(key, value);
collection.update(searchObj,
newObj);
break;
case 3:
System.out.println("Enter removable
key: ");key = scanner.next();
System.out.println("Enter removable
value: ");
value = scanner.next();
BasicDBObject removableObj = new
BasicDBObject();
removableObj.put(key, value);
collection.remove(removableObj);
break;
case 4:
DBCursor cursorDoc =
collection.find();
while (cursorDoc.hasNext()) {
System.out.println(cursorDoc.next());
}
break;
case 5:
System.exit(0);
break;
}
} while(choice != 6);
} catch (UnknownHostException |
MongoException e) {
e.printStackTrace();
}
}
}
```

----- Output

1.insert data into database
2.update database documents
3.delete database documents
4.show database collections

5.Exit
Enter your choice:
1
Enter key:2
Enter value:
harish
Do you want to enter more(y/n)?
N
1.insert data into database
2.update database documents
3.delete database documents
4.show database collections
5.Exit
Enter your choice:
2
Enter searched key:
2
Enter searched value:
harish
Enter new key:
1
Enter new value:
Sam
1.insert data into database
2.update database documents
3.delete database documents
4.show database collections
5.Exit
Enter your choice:
4{
"_id" : { "\$oid" :
"5bb453bce4b0283ac9d3205d"} ,
"1" : "sam"}
1.insert data into database
2.update database documents
3.delete database documents
4.show database collections5.Exit
Enter your choice:
3
Enter removable key:
3
Enter removable value:
hari
1.insert data into database
2.update database documents
3.delete database documents
4.show database collections
5.Exit
Enter your choice:
4{
"_id" : { "\$oid" :
"5bb453bce4b0283ac9d3205d"} ,
"1" : "sam"}
1.insert data into database

2.update database documents
3.delete database documents
4.show database collections
5.Exit
Enter your choice:
5

Assignment 10

```
//USE DATABASE
> use comp;
switched to db comp
//CREATE COLLECTION WEBSITE
> db.createCollection('website');
{ "ok" : 1 }
//INSERT VALUES IN WEBSITE
>
db.website.insert({'roll':'1','name':'harsh','amount':1000,'url':'www.yahoo.com'});
WriteResult({ "nInserted" : 1 })
>db.website.insert({'roll':'2','name':'jitesh','amount':2000,'url':'www.yahoo.com'});
WriteResult({ "nInserted" : 1 })
>db.website.insert({'roll':'3','name':'rina','amount':3000,'url':'www.google.com'});
WriteResult({ "nInserted" : 1 })
>db.website.insert({'roll':'4','name':'ash','amount':4000,'url':'www.gmail.com'});
WriteResult({ "nInserted" : 1 })
>db.website.insert({'roll':'5','name':'ash','amount':1000,'url':'www.pvg.com'});
WriteResult({ "nInserted" : 1 })
//SUM AGGREGATE
> db.website.aggregate({$group:
{_id:"$name","total":
{$sum:"$amount"}}});
{ "_id" : "ash", "total" : 5000 }
{ "_id" : "rina", "total" : 3000 }
{ "_id" : "jitesh", "total" : 2000 }
{ "_id" : "harsh", "total" : 2000 }
//AVG AGGREGATE
> db.website.aggregate({$group:
{_id:"$name","total":
{$avg:"$amount"}}});
{ "_id" : "ash", "total" : 2500 }
{ "_id" : "rina", "total" : 3000 }
{ "_id" : "jitesh", "total" : 2000 }
{ "_id" : "harsh", "total" : 1000 }
//MIN AGGREGATION
> db.website.aggregate({$group:
{_id:"$name","total":
{$min:"$amount"}}});
{ "_id" : "ash", "total" : 1000 }
```

```
{ "_id" : "rina", "total" : 3000 }
{ "_id" : "jitesh", "total" : 2000 }
{ "_id" : "harsh", "total" : 1000 }
//MAX AGGREGATION
> db.website.aggregate({$group:
{_id:"$name","total":
{$max:"$amount"}}});
{ "_id" : "ash", "total" : 4000 }
{ "_id" : "rina", "total" : 3000 }
{ "_id" : "jitesh", "total" : 2000 }
{ "_id" : "harsh", "total" : 1000 }
//FIRST AGGREGATION
> db.website.aggregate({$group:
{_id:"$name","total":
{$first:"$amount"}}});
{ "_id" : "ash", "total" : 4000 }
{ "_id" : "rina", "total" : 3000 }
{ "_id" : "jitesh", "total" : 2000 }
{ "_id" : "harsh", "total" : 1000 }
//LAST AGGREGATION
> db.website.aggregate({$group:
{_id:"$name","total":
{$last:"$amount"}}});
{ "_id" : "ash", "total" : 1000 }
{ "_id" : "rina", "total" : 3000 }
{ "_id" : "jitesh", "total" : 2000 }
{ "_id" : "harsh", "total" : 1000 }
//PUSH AGGREGATION
> db.website.aggregate({$group:
{_id:"$name","total":
{$push:"$amount"}}});
{ "_id" : "ash", "total" : [ 4000, 1000 ] }
{ "_id" : "rina", "total" : [ 3000 ] }
{ "_id" : "jitesh", "total" : [ 2000 ] }
{ "_id" : "harsh", "total" : [ 1000, 1000 ] }
//COUNT AGGREGATION
> db.website.aggregate({$group:
{_id:"$name","total": {$sum:1}}});
{ "_id" : "ash", "total" : 2 }
{ "_id" : "rina", "total" : 1 }
{ "_id" : "jitesh", "total" : 1 }
{ "_id" : "harsh", "total" : 2 }
//ADDTOSSET AGGREGATE
> db.website.aggregate({$group:
{_id:"$name","total":{$addToSet:"$amount"}}});
{ "_id" : "ash", "total" : [ 1000, 4000 ] }
{ "_id" : "rina", "total" : [ 3000 ] }
{ "_id" : "jitesh", "total" : [ 2000 ] }
{ "_id" : "harsh", "total" : [ 1000 ] }
//INDEXING
```

```

> db.createCollection('website1');
{ "ok" : 1 }
>
db.website1.insert({'r':1,'name':'hars
h'});
WriteResult({ "nInserted" : 1 })
> db.website1.find().pretty()
{ "_id" :
ObjectId("5ba3509a4449263297380
12d"), "roll" : 1,
"name" : "harsh" }
{ "_id" :
ObjectId("5ba352934449263297380
12e"), "roll" : 1,
"name" : "harsh" }
>
db.website1.createIndex({'name':1})
{ "numIndexesBefore" : 2, "note" :
"all indexes already
exist", "ok" : 1 }//CREATE INDEXING
> db.website1.createIndex({'name':-
1})
{
"createdCollectionAutomatically" :
false,
"numIndexesBefore" : 2,
"numIndexesAfter" : 3,
"ok" : 1
}
> db.website1.getIndexes()
2018-09-20T13:28:09.628+0530
TypeError: Property 'getIndexes'
of object om.website is not a
function
> db.website1.getIndexes()
[
{ "v" : 1,
"key" : {
"_id" : 1
},
"name" : "_id_",
"ns" : "harsh.website1"
},
{
{
"v" : 1,
"key" : {
"name" : 1
},
"name" : "name_1",
"ns" : "harsh.website1"
},
{
"v" : 1,
"key" : {

```

```

"name" : -1
},
"name" : "name_1",
"ns" : "harsh.website1"
}
]
> db.website1.createIndex({'name':-
1})
{ "numIndexesBefore" : 3, "note" :
"all indexes already
exist", "ok" : 1 }
//DROP INDEX
> db.website.dropIndex({'name':-1})
{ "nIndexesWas" : 3, "ok" : 1 }>
db.website1.dropIndex({'name':1})
{ "nIndexesWas" : 2, "ok" : 1 }>
db.website1.dropIndex({'name':1})
{
"nIndexesWas" : 1,
"ok" : 0,
"errmsg" : "can't find index with key:
{ name: 1.0 }"
}
}
//GET INDEXING
> db.website1.getIndexes()
[
{
{
"v" : 1,
"key" : {
"_id" : 1
},
"name" : "_id_",
"ns" : "harsh.website1"
}
}
]
> db.website1.find().pretty()
{ "_id" :
ObjectId("5ba3509a4449263297380
12d"), "roll" : 1,
"name" : "harsh" }
{ "_id" :
ObjectId("5ba352934449263297380
12e"), "roll" : 1,
"name" : "harsh" }
>
>
db.website1.createIndex({'name':1})
{
"createdCollectionAutomatically" :
false,
"numIndexesBefore" : 1,
"numIndexesAfter" : 2,
"ok" : 1
}

```

```

> db.website1.getIndexes()[
{
  "v" : 1,
  "key" : {
    "_id" : 1
  },
  "name" : "_id_",
  "ns" : "harsh.website1"
},
{
  "v" : 1,
  "key" : { "name" : 1
  },
  "name" : "name_1",
  "ns" : "harsh.website1"
}
]
>
db.website1.dropIndex({'name':1})
{ "nIndexesWas" : 2, "ok" : 1 }
> db.website1.getIndexes()
[
{
  "v" : 1,
  "key" : {
    "_id" : 1
  },
  "name" : "_id_",
  "ns" : "harsh.website1"
}
]
>
db.website1.createIndex({'name':1,'r
':-1})
{"createdCollectionAutomatically" :
false,
"numIndexesBefore" : 1,
"numIndexesAfter" : 2,
"ok" : 1
}
> db.website1.getIndexes()
[
{
  "v" : 1,
  "key" : {
    "_id" : 1
  },
  "name" : "_id_",
  "ns" : "harsh.website1"
},
{
  "v" : 1,
  "key" : {
    "name" : 1,

```

```

    "r" : -1
  },
  "name" : "name_1_r_-1",
  "ns" : "harsh.website1"
}
] (i-
search)`db.website1.insert({'roll':1,'n
ame':'harsh'});':

```


Assignment 11

```
> db.createCollection('Journal');
{ "ok" : 1 }
> db.Journal.insert({'book_id':1,'book_name':'JavacdOOP','amt':500,'status':'Available'});
WriteResult({ "nInserted" : 1 })
>
db.Journal.insert({'book_id':1,'book_name':'JavaOOP','amt':400,'status':'Not Available'});
WriteResult({ "nInserted" : 1 })
> db.Journal.insert({'book_id':1,'book_name':'Java','amt':300,'status':'Not Available'});
WriteResult({ "nInserted" : 1 })
> db.Journal.insert({'book_id':2,'book_name':'Java','amt':300,'status':'Available'});
WriteResult({ "nInserted" : 1 })>
> db.Journal.insert({'book_id':2,'book_name':'OPP','amt':200,'status':'Available'});
WriteResult({ "nInserted" : 1 })
> db.Journal.insert({'book_id':2,'book_name':'C+','amt':200,'status':'Available'});
WriteResult({ "nInserted" : 1 })
> db.Journal.insert({'book_id':3,'book_name':'C+','amt':150,'status':'Available'});
WriteResult({ "nInserted" : 1 })
>
db.Journal.insert({'book_id':3,'book_name':'C+','amt':200,'status':'Not Available'});
WriteResult({ "nInserted" : 1 })
>
db.Journal.insert({'book_id':4,'book_name':'OPP C+','amt':300,'status':'Not Available'});
WriteResult({ "nInserted" : 1 })
>
db.Journal.insert({'book_id':5,'book_name':'OPP C+','amt':400,'status':'Available'});
WriteResult({ "nInserted" : 1 })
```

```
>
db.Journal.insert({'book_id':5,'book_name':'C++','amt':400,'status':'Available'});
WriteResult({ "nInserted" : 1 })
>
db.Journal.insert({'book_id':5,'book_name':'C++Java','amt':400,'status':'Not Available'});
WriteResult({ "nInserted" : 1 })
> var mapfunction=function()
{ emit(this.book_id,this.amt);
> var
reducefunction=function(key,value)
{ return Array.sum(value);};
>
db.Journal.mapReduce(mapfunction,reducefunction,
{'out':'new'});
{
  "result" : "new",
  "timeMillis" : 49,"counts" : {
    "input" : 12,
    "emit" : 12,
    "reduce" : 4,
    "output" : 5
  },
  "ok" : 1
}
>
db.Journal.mapReduce(mapfunction,reducefunction,
{'out':'new'}).find().pretty();
{ "_id" : 1, "value" : 1200 }
{ "_id" : 2, "value" : 700 }
{ "_id" : 3, "value" : 350 }
{ "_id" : 4, "value" : 300 }
{ "_id" : 5, "value" : 1200 }
>
>
> db.new.find().pretty();
{ "_id" : 1, "value" : 1200 }
{ "_id" : 2, "value" : 700 }
{ "_id" : 3, "value" : 350 }
{ "_id" : 4, "value" : 300 }
{ "_id" : 5, "value" : 1200 }
>
```