BIG DATA ANALYTICS WEEK2 ASSIGNMENT NAME – LOCHAN M R USN – 1BM20CS407

```
bmsce@bmsce-Precision-T1700: ~
bye
  nsce@bmsce-Precision-T1700:~$ mongoexport --host localhost --db Karthik --collection Student --csv --out /home/bmsce/Desktop/output.txt --fie
lds "_id","StudName","Usn","Semester","Dept_Name","CGPA","Hobbies";
2022-04-18T15:11:00.509+0530 csv flag is deprecated; please use --type=csv instead
2022-04-18T15:11:00.511+0530 connected to: localhost
2022-04-18T15:11:00.511+0530
2022-04-18T15:11:00.511+0530
                                         exported 1 record
  nsce@bmsce-Precision-T1700:~$ pwd
/home/bmsce
bmscegbmsce-Precision-T1700:~$ mongoexport --host localhost --db Karthik --collection Student --type=csv --out /home/bmsce/Desktop/output.txt --fields "_id","StudName","Usn","Semester","Dept_Name","CGPA","Hobbies"
2022-04-18T15:16:31.097+0530 connected to: localhost
2022-04-18T15:16:31.098+0530
                                            exported 1 record
bmsce@bmsce-Precision-T1700:~$ sudo mongoexport --host localhost --db Karthik --collection Student --type=csv --out /home/bmsce/Desktop/output
.txt --fields "_id","StudName","Usn","Semester","Dept_Name","CGPA","Hobbies"
[sudo] password for bmsce:
 msce@bmsce-Precision-T1700:~$
2022-04-18T15:19:13.567+0530
                                            connected to: localhost
2022-04-18T15:19:13.567+0530
                                            exported 1 record
                 Precision-T1700:~$ mongo
MongoDB shell version v3.6.8
connecting to: mongodb://127.0.0.1:27017
Implicit session: session { "id" : UUID("55fb0928-57d3-4119-a529-34f8a2619c30") }
MongoDB server version: 3.6.8
Server has startup warnings:
2022-04-18T13:57:39.395+0530 I STORAGE [initandlisten]
2022-04-18T13:57:39.395+0530 I STORAGE [initandlisten] ** WARNING: Using the XFS filesystem is strongly recommended with the WiredTiger stora
ge engine
2022-04-18T13:57:39.395+0530 I STORAGE
2022-04-18T13:57:48.671+0530 I CONTROL
                                                       [initandlisten] **
[initandlisten]
                                                                                             See http://dochub.mongodb.org/core/prodnotes-filesystem
                                                       [initandlisten] ** WARNING: Access control is not enabled for the database.
[initandlisten] ** Read and write access to data and configuration
2022-04-18T13:57:48.671+0530 I CONTROL
2022-04-18T13:57:48.671+0530 I CONTROL
                                                                                              Read and write access to data and configuration is unrestricted.
2022-04-18T13:57:48.671+0530 I CONTROL
                                                       [initandlisten]
 use Karthik
switched to db Karthik
  db.Student.find({});
  "_id" : 1,
                  "studName" : "John", "Grade" : "VII", "Hobbies" : "InternetSurfing" }
      e@bmsce-Precision-T1700:∼S sudo mongoexport --host localhost --db Karthik --collection student --type=csy --out /home/bmsce/Desktop/output
```

```
bmsce@bmsce-Precision-T1700: ~
omsce@bmsce-Precision-T1700:~$ mongo
MongoDB shell version v3.6.8
connecting to: mongodb://127.0.0.1:27017
Implicit session: session { "id" : UUID("dd4034b4-efba-4547-a66c-b4c5cfa8c452") }
MongoDB server version: 3.6.8
Server has startup warnings:
                                             [initandlisten]
[initandlisten] ** WARNING: Using the XFS filesystem is strongly recommended with the WiredTiger stora
2022-04-18T13:57:39.395+0530 I STORAGE
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ge engine
2022-04-18T13:57:39.395+0530 I STORAGE
                                              [initandlisten] **
                                                                              See http://dochub.mongodb.org/core/prodnotes-filesystem
                                              [initandlisten]
[initandlisten] ** WARNING: Access control is not enabled for the database.
[initandlisten] ** Read and write access to data and configuration
2022-04-18T13:57:48.671+0530 I CONTROL
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2022-04-18T13:57:48.671+0530 I CONTROL
                                                                              Read and write access to data and configuration is unrestricted.
2022-04-18T13:57:48.671+0530 I CONTROL
                                              [initandlisten]
 use Karthik
switched to db Karthik
 db.Student.insert({_id:1,studName:"John",Grade:"VII",Hobbles:"InternetSurfing"});
WriteResult({ "nInserted" : 1 })
> db.student.insert({_id:3,StudName:"Karthik",Usn:"1BM19CS070",Semester:"6thSem",Dept_Name:"CSE",CGPA:9,Hobbies:"YouTuber"});
 riteResult({
         "errmsq" : "E11000 duplicate key error collection: Karthik.student index: id dup key: { : 3.0 }"
1)
 db.student.insert({_id:3,StudName:"Karthik",Usn:"1BM19CS070",Semester:"6thSem",Dept_Name:"CSE",CGPA:9,Hobbies:"YouTuber"});
WriteResult({
         "nInserted" : 0
         "writeError" : {
"_id": "5thSem", "AvgCGPA": 9.12 }
"_id": "6thSem", "AvgCGPA": 9 }
mongoexport --host localhost --db Student --collection airlines --csv --out
  022-04-18T15:04:00.798+0530 E QUERY [thread1] SyntaxError: missing; before statement @(shell):1:14
/home/hduser/Desktop/output.txt -fields "Year" "Quarter"
2022-04-18T15:04:00.798+0530 E QUERY
```

```
db.product.find({pid:1},{pid:1,_id:0,mdate:1,quantity:1});
"pid" : 1, "mdate" : 2001, "quantity" : 2 }
db.product.find({price:{$ne:15000}},{pname:1,_id:0});
          "pname" : "keyboard" }
"pname" : "mouse" }
           pname"
                                  : "monitor
       db.product.find({\$and:[{quantity:{\$eq:9}},{pname:{\$eq:"monitor"}}]},{pname:1,_id:0})
      db.product.find({pname:/d$/},{pname:1,quantity:1,_id:0})
"pname" : "keyboard", "quantity" : 2 }
"pname" : "motherboard", "quantity" : 4 }
db.createCollection("hospital");
      "ok" : 1 }
db.hospital.insert({_id:1, Name: "Anshuman Agarwal", age:23, diseases:["fever", "diarrhoea", "wheezing", "gastritis"]});
 > db.hospital.insert({_id:1, Name: Anshuman Agarwat , age.23, diseases:["fever","nausea", "food infection", "indigestion", "kidney stones"]});
WriteResult({ "nInserted" : 1 })
> db.hospital.insert({_id:2, Name: "Pinky Chaubey", age:35, diseases:["fever","nausea", "food infection", "indigestion", "kidney stones"]});
WriteResult({ "nInserted" : 1 })
> db.hospital.insert({_id:3, Name: "Amresh Chowpati", age:63, diseases:["hyperglycemia", "diabetes mellitus", "food poisoning", "cold"]});
WriteResult({ "nInserted" : 1 })
> db.hospital.updateMany({},{$pull:{diseases:"fever"}});
{ "acknowledged" : true, "matchedCount" : 3, "modifiedCount" : 2 }
> db.hospital.updateOne({_id:1},{$pop:{diseases:-1}});
{ "acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
      "acknowledged" : true, "matchedcount" : 1 , "modifiedCount" : 1 }
db.hospital.find({"diseases.2":"nausea"});
db.hospital.find({"diseases.1":"nausea"});
d.hospital.find({});
   uncaught exception: ReferenceError: d is not defined :
  @(shell):1:1
 @(snetl):1:1
> db.hospital.find({});
{ "_id" : 1, "Name" : "Anshuman Agarwal", "age" : 23, "diseases" : [ "wheezing", "gastritis" ] }
{ "_id" : 1, "Name" : "Anshuman Agarwal", "age" : 35, "diseases" : [ "nausea", "food infection", "indigestion", "kidney stones" ] }
{ "_id" : 2, "Name" : "Pinky Chaubey", "age" : 63, "diseases" : [ "hyperglycemia", "diabetes mellitus", "food poisoning", "cold" ] }
> db.hospital.find({"diseases.0":"nausea"});
{ "_id" : 2, "Name" : "Pinky Chaubey", "age" : 35, "diseases" : [ "nausea", "food infection", "indigestion", "kidney stones" ] }
> db.hospital.update({_id:3},{$set:{'diseases.1':'sarscov'}});
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> 
      db.createCollection("faculty"):
{ "ok" : 1 }
> db.faculty.insert({ id:1,name:"Dr. Balaraman Ravindran",designation:"Professor",department:"CSE",age:45,salary:100000,specialization:['pytho n','mysql','sklearn', 'tensorflow']});
WriteResult({ "nInserted" : 1 })
> db.faculty.insert({ id:2,name:"Dr. Mahadev Ghorki",designation:"Assistant Professor",department:"CSE",age:35,salary:80000,specialization:['python','numpy','sklearn', 'tensorflow', 'java']});
WriteResult({ "nInserted" : 1 })
> db.faculty.insert({ id:3,name:"Dr. Praveen Borade",designation:"Associate Professor",department:"ME",age:40,salary:75000,specialization:['au tocad', 'aerodynamics', 'thermal physics']});
WriteResult({ "nInserted" : 1 })
> db.faculty.insert({ id:4,name:"Dr. Madhav Nayak",designation:"Assistant Professor",department:"ME",age:37,salary:95000,specialization:['autocad', 'flight-dynamics', 'Finite Element Analysis']});
WriteResult({ "nInserted" : 1 })
> db.faculty.aggregate ( {$match:{department:"ME"}}, {$group : { id : "$designation", AverageSal :{$avg:"$salary"} } }, {$match:{AverageSal:{}avg:"$salary"} } }, {$match:{AverageSal:{}avg:"$salary"} }, {$match:{AverageSal:{}avg:"$salary:"$salary:"$salary:"$salary:"$salary:"$salary:"$salary:"$salary:"$salary:"$salary:"$salary:"$salary:"$salary:"$salary:"$salary:"$salary:"$salary
 witteresulty aggregate ( {$match:{department:"ME"}}, {$group : {_id : "$designation", AverageSal :{$avg:"$salary"} } }, {$match:{AverageSal:{ $$gt:56060}}}); { "_id" : "Associate Professor", "AverageSal" : 75000 } { "_id" : "Assistant Professor", "AverageSal" : 95000 }
      db.createCollection("product");
          'ok" : 1 }
      db.product.insert({pid:1,pname:"keyboard",mdate:2001,price:1800,quantity:2});
  WriteResult({    "nInserted" : 1 })
> db.product.insert({pid:2,pname:"mouse",mdate:2005,price:1500,quantity:5});
    /riteResult({    "nInserted" : 1    })
- db.product.insert({pid:3,pname:"monitor",mdate:2015,price:10000,quantity:9});
   writeResult({    "nInserted" : 1    })
> db.product.insert({pid:4,pname:"motherboard",mdate:2021,price:15000,quantity:4});
  WriteResult({ "nInserted" : 1 })
> db.product.find({},{pname:1,_id:0})
{ "pname" : "keyboard" }
          "pname" : "mouse" }
"pname" : "monitor"
      "pname" : "monitor" }
"pname" : "motherboard" }
db.product.find({pid:1},{pid:1,_id:0,mdate:1,quantity:1});
"pid" : 1, "mdate" : 2001, "quantity" : 2 }
db.product.find({price:{$ne:15000}},{pname:1,_id:0});
          "pname" : "keyboard" }
```

```
@(shell):1:20
> db.Bank.update({_id:625d78659329139694f188a6}, {$set: {CustID:5}},{upsert:true});
uncaught exception: SyntaxError: identifier starts immediately after numeric literal :
@(shell):1:20
 db.Bank.update({_id:"625d78659329139694f188a6"}, {$set: {CustID:5}}, {upsert:true});
WriteResult({
           "nMatched" : 0,
          "nUpserted" : 1,
"nModified" : 0,
           "_id" : "625d78659329139694f188a6"
3)
)/
> db.Bank.find({});
{ "_id" : ObjectId("625d77809329139694f188a2"), "CustID" : 1, "Name" : "Trivikram Hegde", "Type" : "Savings", "Contact" : [ "9945678231" ] }
{ "_id" : ObjectId("625d77bd9329139694f188a3"), "CustID" : 2, "Name" : "Vishvesh Bhat", "Type" : "Savings", "Contact" : [ "6325985615", "080-2
3651452" ] }
   __id_ : objectId("625d77e69329139694f188a4"), "CustID" : 3, "Name" : "Vaishak Bhat", "Type" : "Savings", "Contact" : [ "8971456321", "080-33"
529458" ] }
{ "_id" : ObjectId("625d78229329139694f188a5"), "CustID" : 4, "Name" : "Pramod P Parande", "Type" : "Current", "Contact" : [ "9745236589", "08
 -56324587" ] }
-56324587" ] }
| "_id" : ObjectId("625d78659329139694f188a6"), "CustID" : 4, "Name" : "Shreyas R S", "Type" : "Current", "Contact" : [ "9445678321", "044-656
m.ccenesult( nmatched : 1, "nUpserted" : 0, "nModified" : 1 })
> db.Bank.find({});
{ "_id" : ObjectId("625d77809329139694f188a2"), "CustID" : 1, "Name" : "Trivikram Hegde", "Type" : "Savings", "Contact" : [ "9945678231" ] }
{ "_id" : ObjectId("625d77bd9329139694f188a3"), "CustID" : 2, "Name" : "Vishvesh Bhat", "Type" : "Savings", "Contact" : [ "6325985615", "080-2
3651452" ] }
   "_id" : ObjectId("625d77e69329139694f188a4"), "CustID" : 3, "Name" : "Vaishak Bhat", "Type" : "Savings", "Contact" : [ "8971456321", "080-33"
 29458" ] }
"_id" : ObjectId("625d78229329139694f188a5"), "CustID" : 4, "Name" : "Pramod P Parande", "Type" : "Current", "Contact" : [ "9745236589", "08
0-56324587" ] }
0-3034-367 ] }
{ "_id" : ObjectId("625d78659329139694f188a6"), "CustID" : 4, "Name" : "Shreyas R S", "Type" : "Current", "Contact" : [ "9445678321", "044-656
11729" ] }
{ "_id" : "625d78659329139694f188a6", "CustID" : 5, "Contact" : [ "9856321478", "011-65897458" ], "Name" : "Sumantha K S", "Type" : "Savings"
  П
```

```
db.createCollection("Bank");
  "ok" : 1 }
db.insert({CustID:1, Name:"Trivikram Hegde", Type:"Savings", Contact:["9945678231", "080-22364587"]});
uncaught exception: TypeError: db.insert is not a function :
@(shell):1:1
> db.Bank.insert({CustID:1, Name:"Trivikram Hegde", Type:"Savings", Contact:["9945678231", "080-22364587"]});
WriteResult({ "nInserted" : 1 })
 db.Bank.insert({CustID:2, Name:"Vishvesh Bhat", Type:"Savings", Contact:["6325985615", "080-23651452"]});
WriteResult({ "nInserted"
                              1 })
 db.Bank.insert({CustID:3, Name:"Vaishak Bhat", Type:"Savings", Contact:["8971456321", "080-33529458"]});
WriteResult({ "nInserted"
                            : 1 })
 db.Bank.insert({CustID:4, Name: "Pramod P Parande", Type: "Current", Contact: ["9745236589", "080-56324587"]});
writeResult({ "nInserted" : 1 })
 db.Bank.insert({CustID:4,
                               Name: "Shreyas R S", Type: "Current", Contact: ["9445678321", "044-65611729", "080-25639856"]});
 WriteResult({
                "nInserted" : 1 })
  db.Bank.find({});
   _id" : ObjectId("625d77809329139694f188a2"), "CustID" : 1, "Name" : "Trivikram Hegde", "Type" : "Savings", "Contact" : [ "9945678231", "080
 22364587" ] }
[ "_id" : ObjectId("625d77bd9329139694f188a3"), "CustID" : 2, "Name" : "Vishvesh Bhat", "Type" : "Savings", "Contact" : [ "6325985615", "080-2
[651452" ] }
_id" : ObjectId("625d78229329139694f188a5"), "CustID" : 4, "Name" : "Pramod P Parande", "Type" : "Current", "Contact" : [ "9745236589", "08
  56324587"
 "_id": ObjectId("625d78659329139694f188a6"), "CustID": 4, "Name": "Shreyas R S", "Type": "Current", "Contact": [ "9445678321", "044-656
1729", "080-25639856" ] }
  db.Bank.updateMany({CustID:1},{$pop:{Contact:1}} );
"acknowledged" : true, "matchedCount" : 1, "modifiedCount" : 1 }
  db.Bank.find({});
  "_id": ObjectId("625d77809329139694f188a2"), "CustID": 1, "Name": "Trivikram Hegde", "Type": "Savings", "Contact": [ "9945678231" ] }
"_id": ObjectId("625d77bd9329139694f188a3"), "CustID": 2, "Name": "Vishvesh Bhat", "Type": "Savings", "Contact": [ "6325985615", "080-2
 651452"
         1 }
  "_id": ObjectId("625d77e69329139694f188a4"), "CustID" : 3, "Name" : "Vaishak Bhat", "Type" : "Savings", "Contact" : [ "8971456321", "080-33
9458" ] }
 29458"
   _id" : ObjectId("625d78229329139694f188a5"), "CustID" : 4, "Name" : "Pramod P Parande", "Type" : "Current", "Contact" : [ "9745236589", "08
 { "_id" : ObjectId("625d78659329139694f188a6"), "CustID" : 4, "Name" : "Shreyas R S", "Type" : "Current", "Contact" : [ "9445678321", "044-656
11729", "080-25639856" ] }
> db.Bank.updateMany({},{$pull:{Contact:"080-25639856"}} );
{ "acknowledged" : true, "matchedCount" : 5, "modifiedCount" : 1 }
  db.Bank.find({});

"_id" : ObjectId("625d77809329139694f188a2"), "CustID" : 1, "Name" : "Trivikram Hegde", "Type" : "Savings", "Contact" : [ "9945678231" ] }

"_id" : ObjectId("625d77bd9329139694f188a3"), "CustID" : 2, "Name" : "Vishvesh Bhat", "Type" : "Savings", "Contact" : [ "6325985615", "080-2
3651452"
  __id" : ObjectId("625d77e69329139694f188a4"), "CustID" : 3, "Name" : "Vaishak Bhat", "Type" : "Savings", "Contact" : [ "8971456321", "080-33"
529458" ] }
{ "_id" : ObjectId("625d78229329139694f188a5"), "CustID" : 4, "Name" : "Pramod P Parande", "Type" : "Current", "Contact" : [ "9745236589", "08
  56324587"
             1)
   _id" : ObjectId("625d78659329139694f188a6"), "CustID" : 4, "Name" : "Shreyas R S", "Type" : "Current", "Contact" : [ "9445678321", "044-656
 1729"
  db.Bank.createIndex({Name:1, Type:1},{name:});
uncaught exception: SyntaxError: expected expression, got '}' :
@(shell):1:43
  db.Bank.createIndex({Name:1, Type:1},{name:"Find current account holders"});
         "createdCollectionAutomatically" : false,
         "numIndexesBefore" : 1,
"numIndexesAfter" : 2,
"ok" : 1
  db.Bank.find({});
"_id" : ObjectId("625d77809329139694f188a2"), "CustID" : 1, "Name" : "Trivikram Hegde", "Type" : "Savings", "Contact" : [ "9945678231" ] }
"_id" : ObjectId("625d77bd9329139694f188a3"), "CustID" : 2, "Name" : "Vishvesh Bhat", "Type" : "Savings", "Contact" : [ "6325985615", "080-2
3651452"
  __id" : ObjectId("625d77e69329139694f188a4"), "CustID" : 3, "Name" : "Vaishak Bhat", "Type" : "Savings", "Contact" : [ "8971456321", "080-33"
529458'
   56324587"
{ "_id" : ObjectId("625d78659329139694f188a6"), "CustID" : 4, "Name" : "Shreyas R S", "Type" : "Current", "Contact" : [ "9445678321", "044-656
11729" ] }
  db.Bank.getIndexes()
                  "v" : 2,
```