Assignment -B4

Implement Map reduces operation with suitable example using MongoDB.

```
> use I2IT;
switched to db I2IT
> db.orders.insert({"Cust_ID":"A123","Amount":"500","Status":"A"});
WriteResult({ "nInserted" : 1 })
> db.orders.insert({"Cust_ID":"A123","Amount":"250","Status":"A"});
WriteResult({ "nInserted" : 1 })
> db.orders.insert({"Cust_ID":"B212","Amount":"200","Status":"A"});
WriteResult({ "nInserted" : 1 })
> db.orders.insert({"Cust_ID":"A123","Amount":"300","Status":"D"});
WriteResult({ "nInserted" : 1 })
> db.orders.find()
{ "_id" : ObjectId("5f7abd9e10d6008808ce40e9"), "Cust_ID" : "A123",
"Amount" : "500", "Status" : "A" }
{ "_id" : ObjectId("5f7abdb010d6008808ce40ea"), "Cust_ID" : "A123",
"Amount" : "250", "Status" : "A" }
{ "_id" : ObjectId("5f7abdd110d6008808ce40eb"), "Cust_ID" : "B212",
"Amount" : "200", "Status" : "A" }
{ "_id" : ObjectId("5f7abde510d6008808ce40ec"), "Cust_ID" : "A123",
"Amount" : "300", "Status" : "D" }
>
db.orders.mapReduce(function(){emit(this.Cust_ID,this.Amount);},fun
ction(key, values) {return Array.sum(
values)},{query:{"Status":"A"},out: "order_totals"})
{ "result" : "order_totals", "ok" : 1 }
> var mapFunc1 = function(){emit(this.Cust_ID,this.Amount);};
> var reduceFunc1 = function(keyCustID,valuePrices){return
Array.sum(valuePrices);};
> db.orders.mapReduce(mapFunc1,reduceFunc1,{out:"Map_Example2"})
{ "result" : "Map_Example2", "ok" : 1 }
> db.order_totals.find()
{ "_id" : "B212", "value" : "200" }
{ "_id" : "A123", "value" : "250500" }
> db.Map_Example2.find()
{ "_id" : "B212", "value" : "200" }
{ "_id" : "A123", "value" : "300250500" }
> db.students.find()
> ;
> .preety();
```

```
uncaught exception: SyntaxError: expected expression, got '.' :
@(shell):1:0
> db.student.find()
{ "_id" : ObjectId("5f68498ad270133c4c90808c"), "id" : "TI002",
"Name" : "XYZ", "Credits" : 6.5, "City" : "Pune" }
{ "_id" : ObjectId("5f6aea0a5a9d4c21404ba23b"), "id" : "TI002",
"Name" : "PQR", "Credits" : 8.3 }
{ "_id" : ObjectId("5f6aea265a9d4c21404ba23c"), "id" : "TI003",
"Name" : "XYZ", "Credits" : 8.7 }
{ "_id" : ObjectId("5f6aea395a9d4c21404ba23d"), "id" : "TI004",
"Name" : "ASD", "Credits" : 7.6 }
{ "_id" : ObjectId("5f6aea495a9d4c21404ba23e"), "id" : "TI005",
"Name" : "DEF", "Credits" : 7.8 }
{ "_id" : ObjectId("5f6af1775a9d4c21404ba23f"), "id" : "TI006",
"Name" : "ASB", "Credits" : 7.9, "Languages" : [ "C", "C++", "Java"
] }
{ "_id" : ObjectId("5f6af1945a9d4c21404ba240"), "id" : "TI007",
"Name" : "XTB", "Credits" : 8.5, "Languages" : [ "C", "C++",
"Java", "Python" ] }
> var mapFunc2 = function(){emit(this.id,this.Credits);};
> var reduceFunc2 = function(keyID,valueCredits){return
Array.sum(valueCredits);};
> db.student.mapReduce(mapFunc2,reduceFunc2,{out:"Map_Example3"})
{ "result" : "Map_Example3", "ok" : 1 }
> db.Map_Example3.find()
{ "_id" : "TI002", "value" : 14.8 }
{ "_id" : "TI004", "value" : 7.6 }
{ "_id" : "TI007", "value" : 8.5 }
{ "_id" : "TI003", "value" : 8.7 }
{ "_id" : "TI005", "value" : 7.8 }
{ "_id" : "TI006", "value" : 7.9 }
>
```