ASSIGNMENT 3 MAP REDUCE FUNCTION

```
> use assi3mapreduce
switched to db assi3mapreduce
> db.stud.insert({"name":'stud1','marks':80});
WriteResult({ "nInserted" : 1 })
> db.stud.insert({"name":'stud2','marks':70});
WriteResult({ "nInserted" : 1 })
> db.stud.insert({"name":'stud3','marks':75});
WriteResult({ "nInserted" : 1 })
> db.stud.insert({"name":'stud4','marks':57});
WriteResult({ "nInserted" : 1 })
> db.stud.insert({"name":'stud1','marks':69});
WriteResult({ "nInserted" : 1 })
> db.stud.insert({"name":'stud3','marks':88});
WriteResult({ "nInserted" : 1 })
>
>
> db.stud.find();
{ "_id" : ObjectId("61928d3525c7985c0ba1dec9"), "name" : "stud1", "marks" : 80 }
{ "_id" : ObjectId("61928d3c25c7985c0ba1deca"), "name" : "stud2", "marks" : 70 }
{ "id": ObjectId("61928d4425c7985c0ba1decb"), "name": "stud3", "marks": 75 }
{ "_id" : ObjectId("61928d4c25c7985c0ba1decc"), "name" : "stud4", "marks" : 57 }
{ " id" : ObjectId("61928d5425c7985c0ba1decd"), "name" : "stud1", "marks" : 69 }
{ "_id" : ObjectId("61928d5c25c7985c0ba1dece"), "name" : "stud3", "marks" : 88 }
>
```

```
> db.stud.mapReduce(
... function(){emit(this.name,1)},
... function(key, values) { return Array.sum(values) },
... {out:"name_total"})
{ "result" : "name_total", "ok" : 1 }
>
>
> var mapFunc=function(){emit(this.name,1)}
> var redFunc=function(key, values){return Array.sum(values);}
> var mapFunc1=function(){emit(this.name,1);}
> db.stud.mapReduce(mapFunc1,redFunc,{out:"name_total"})
{ "result" : "name_total", "ok" : 1 }
> db.name_total.find();
{ "_id" : "stud1", "value" : 2 }
{ "_id" : "stud4", "value" : 1 }
{ "_id" : "stud2", "value" : 1 }
{ "_id" : "stud3", "value" : 2 }
>
>
>
> var mapFunc2=function(){emit(this.name,this.marks);}
>
>
> db.stud.mapReduce(mapFunc2,redFunc,{out:"name_total_marks"})
{ "result" : "name_total_marks", "ok" : 1 }
> db.name_total_marks.find();
```

```
{ "_id" : "stud4", "value" : 57 }
{ "_id" : "stud2", "value" : 70 }
{ "_id" : "stud3", "value" : 163 }
{ "_id" : "stud1", "value" : 149 }
>exit
> use assi2aggindex;
switched to db assi2aggindex
> show collections;
ass2
> db.ass2.find();
{ "_id" : ObjectId("619143551b160fe44cd517aa"), "roll" : 1, "name" : "stud1", "subject" : "oop",
"marks" : 90 }
{ "_id" : ObjectId("619143681b160fe44cd517ab"), "roll" : 2, "name" : "stud2", "subject" : "toc",
"marks" : 57 }
{ "id": ObjectId("6191437f1b160fe44cd517ac"), "roll": 3, "name": "stud3", "subject": "cpp",
"marks": 67 }
{ "id": ObjectId("6191438e1b160fe44cd517ad"), "roll": 4, "name": "stud4", "subject": "cns",
"marks" : 77 }
{ "_id" : ObjectId("6191439e1b160fe44cd517ae"), "roll" : 5, "name" : "stud5", "subject" : "dbms",
"marks": 97 }
{ "_id" : ObjectId("619143b01b160fe44cd517af"), "roll" : 6, "name" : "stud6", "subject" : "spos",
"marks": 87 }
{ "_id" : ObjectId("6191471e1b160fe44cd517b1"), "roll" : 8, "name" : "stud5", "subject" : "dbms",
"marks" : 50 }
>
>
>
> var mapFunc=function(){emit(this.subject,this.marks);}
> var redFunc=function(key, values){var markss=0; for(var i=0; i<values.length; i++){
markss+=values[i];} return markss; }
```

```
> db.ass2.mapReduce(mapFunc ,redFunc ,{out:"total_sub"})
{ "result" : "total_sub", "ok" : 1 }
> 
> db.total_sub.find();
{ "_id" : "dbms", "value" : 147 }
{ "_id" : "oop", "value" : 90 }
{ "_id" : "cns", "value" : 77 }
{ "_id" : "spos", "value" : 87 }
{ "_id" : "toc", "value" : 57 }
{ "_id" : "cpp", "value" : 67 }
> exit
```