Group B - 4
Stu.json:

```
{"roll": "1", "name" : "Akshay","Marks":37}
{"roll": "2", "name" : "Sourabh","Marks":40} {"roll": "3", "name" :
"Avesh","Marks":42}
{"roll": "1", "name" : "Akshay","Marks":45}
{"roll": "2", "name" : "Sourabh","Marks":47} {"roll": "3", "name" :
"Avesh","Marks":40}
{"roll": "1", "name" : "Akshay","Marks":39}
{"roll": "2", "name" : "Sourabh","Marks":40} {"roll": "3", "name" :
"Avesh","Marks":45}
```

Steps to run :

1. import .json file

```
root@student:/home/student# mongoimport --db stu --collection student --
file
/home/student/Desktop/stu.json
2017-09-25T17:08:54.631+0530 connected to: localhost
2017-09-25T17:08:54.775+0530 imported 9 documents
```

2. mongo shell
```
root@student:/home/student# mongo MongoDB shell version v3.4.6
connecting to: mongodb://127.0.0.1:27017 MongoDB server version: 3.4.6
```

```
> use stu
 switched to db stu
```

```
> db.student.find();
{ "_id" : ObjectId("59c8eacee47427a086254422"), "roll" : "1", "name" :
"Akshay", "Marks" : 45 }
{ "_id" : ObjectId("59c8eacee47427a086254423"), "roll" : "1", "name" :
"Akshay", "Marks" : 37 }
{ "_id" : ObjectId("59c8eacee47427a086254424"), "roll" : "2", "name" :
"Sourabh", "Marks" : 47 }
{ "_id" : ObjectId("59c8eacee47427a086254425"), "roll" : "3", "name" :
"Avesh", "Marks" : 42 }
{ "_id" : ObjectId("59c8eacee47427a086254426"), "roll" : "2", "name" :
"Sourabh", "Marks" : 40 }

{ "_id" : ObjectId("59c8eacee47427a086254427"), "roll" : "3", "name" :
"Avesh", "Marks" : 45 }

{ "_id" : ObjectId("59c8eacee47427a086254428"), "roll" : "3", "name" :
"Avesh", "Marks" : 40 }

{ "_id" : ObjectId("59c8eacee47427a086254429"), "roll" : "1", "name" :
"Akshay", "Marks" : 39 }
{ "_id" : ObjectId("59c8eacee47427a08625442a"), "roll" : "2", "name" :
"Sourabh", "Marks" : 40 }
```

Map Reduce Function

```
> var Mapfunction = function(){emit(this.roll,this.Marks)}
> var Reducefunction = function(key,values){return Array.sum(values)}
> db.student.mapReduce(Mapfunction,Reducefunction,{'out':'MR_Result'})
{
"result" : "MR_Result",
"timeMillis" : 575,
```

```
"counts" : {
"input" : 9,
"emit" : 9,
"reduce" : 3,
"output" : 3
},
"ok" : 1
}
> db.MR_Result.find();
{ "_id" : "1", "value" : 121 }
{ "_id" : "2", "value" : 127 }
{ "_id" : "3", "value" : 127 }

> var Mapfunction = function(){emit(this.roll,this.Marks)}
> var Reducefunction = function(key,values){return Array.avg(values)}
> db.student.mapReduce(Mapfunction,Reducefunction,{'out':'MR_Result'})
{
"result" : "MR_Result",
"timeMillis" : 395,
"counts" : {
"input" : 9,
"emit" : 9,
"reduce" : 3,
"output" : 3
},
"ok" : 1
}
> show tables;
 MR_Result student
```

Showing result
```
> db.MR_Result.find();
{ "_id" : "1", "value" : 40.333333333333336 }
{ "_id" : "2", "value" : 42.333333333333336 }
{ "_id" : "3", "value" : 42.333333333333336 }
```