Aggregate functions

1. Count

> db.Details.aggregate([{\$match: {gender:"M"}},{\$count: "Number of males"}])

```
> db.Details.aggregate([{$match: {gender:"M"}},{$count: "Number_of_males"} ] )
{ "Number_of_males" : 2 }
> ■
```

2. Min

> db.Details.aggregate([{\$group:{_id:"\$name",minimumage:{\$min:"\$age"}}}])

```
> db.Details.aggregate([{$group:{_id:"$name",minimumage:{$min:"$age"}}}])
{ "_id" : "Anjali", "minimumage" : 23 }
{ "_id" : "Pragati", "minimumage" : 23 }
{ "_id" : "Indiana", "minimumage" : null }
{ "_id" : "Sarthak", "minimumage" : 21 }
{ "_id" : "John", "minimumage" : 63 }
```

3. Max

> db.Details.aggregate([{\$group:{_id:"\$name",maximumage:{\$max:"\$age"}}}])

```
> db.Details.aggregate([{$group:{_id:"$name",maximumage:{$max:"$age"}}}])
{ "_id" : "Anjali", "maximumage" : 23 }
{ "_id" : "Pragati", "maximumage" : 23 }
{ "_id" : "Indiana", "maximumage" : null }
{ "_id" : "Sarthak", "maximumage" : 21 }
{ "_id" : "John", "maximumage" : 63 }
```

4. Min All

> db.Details.aggregate([{\$match:{}},{\$group:{_id:"age",min_age_of_all:{\$min:"\$age"}}}])

```
> db.Details.aggregate([{$match:{}},{$group:{_id:"age",min_age_of_all:{$min:"$age"}}}])
{ "_id" : "age", "min_age_of_all" : 21 }
```

5. First

> db.mycollection.aggregate([{\$match:{}},{\$group:{_id:"age",first_age:{\$first:"\$age"}}}])

```
> db.Details.aggregate([{$match:{}},{$group:{_id:"age",first_age:{$first:"$age"}}}])
{ "_id" : "age", "first_age" : 21 }
```

6. Last

> db.Details.aggregate([{\$match:{}},{\$group:{_id:"age",last_age:{\$last:"\$age"}}}])

```
> db.Details.aggregate([{$match:{}},{$group:{_id:"age",last_age:{$last:"$age"}}}])
{ "_id" : "age", "last_age" : 23 }
```

7. Average

> db.Details.aggregate([{\$match:{}},{\$group:{_id:"age",avg:{\$avg:"\$age"}}}])

```
> db.Details.aggregate([{$match:{}},{$group:{_id:"age",avg:{$avg:"$age"}}}])
{ "_id" : "age", "avg" : 32.5 }
```

8. Sum

> db.Details.aggregate([{\$match:{}},{\$group:{_id:"age",sum:{\$sum:"\$age"}}}])

```
> db.Details.aggregate([{$match:{}},{$group:{_id:"age",sum:{$sum:"$age"}}
\{ "_id" : "age", "sum" : 130 }
```