**ASSIGNMENT : 11**

* **Aggregation:**
  + - **Sum:**

MongoDB Enterprise > db.emp.aggregate([{$group: {\_id:"sal",num\_tutorial:{$sum:1}}}])

{ "\_id" : "sal", "num\_tutorial" : 7 }

MongoDB Enterprise > db.emp.aggregate([{$group: {\_id:"sal",num\_tutorial:{$sum:"$sal"}}}])

{ "\_id" : "sal", "num\_tutorial" : 505000 }

* + - **Avg:**

MongoDB Enterprise > db.emp.aggregate([{$group: {\_id:"sal",num\_tutorial:{$avg:"$sal"}}}])

{ "\_id" : "sal", "num\_tutorial" : 72142.85714285714 }

* + - **min:**

MongoDB Enterprise > db.emp.aggregate([{$group: {\_id:"sal",num\_tutorial:{$min:"$sal"}}}])

{ "\_id" : "sal", "num\_tutorial" : 20000 }

* + - **max:**

MongoDB Enterprise > db.emp.aggregate([{$group: {\_id:"sal",num\_tutorial:{$max:"$sal"}}}])

{ "\_id" : "sal", "num\_tutorial" : 100000 }

* + - **first:**

MongoDB Enterprise > db.emp.aggregate([{$group:{\_id:"sal",first: {$first:"$ename"}}}])

{ "\_id" : "sal", "first" : "Chetan" }

* + - **last:**

MongoDB Enterprise > db.emp.aggregate([{$group:{\_id:"sal",first: {$last:"$city"}}}])

{ "\_id" : "sal", "first" : "Akola" }

**$project:**

MongoDB Enterprise > db.emp.aggregate([{$project: {\_id:"sal",num\_tutorial:{$sum:"$sal"}}}])

{ "\_id" : "sal", "num\_tutorial" : 100000 }

{ "\_id" : "sal", "num\_tutorial" : 90000 }

{ "\_id" : "sal", "num\_tutorial" : 70000 }

{ "\_id" : "sal", "num\_tutorial" : 80000 }

{ "\_id" : "sal", "num\_tutorial" : 60000 }

{ "\_id" : "sal", "num\_tutorial" : 20000 }

{ "\_id" : "sal", "num\_tutorial" : 85000 }

* **Indexing:**

MongoDB Enterprise > db.emp.ensureIndex({"eid":1},{"unique":true})

{

"createdCollectionAutomatically" : false,

"numIndexesBefore" : 1,

"numIndexesAfter" : 2,

"ok" : 1

}

MongoDB Enterprise > db.emp.find().pretty()

{

"\_id" : ObjectId("59b967cf18040d5dad8592bb"),

"eid" : 1,

"ename" : "Chetan",

"sal" : 100000,

"city" : "Pune"

}

{

"\_id" : ObjectId("59b9685a18040d5dad8592bd"),

"eid" : 2,

"ename" : "Parth",

"sal" : 90000,

"city" : "Kota"

}

{

"\_id" : ObjectId("59b9687018040d5dad8592be"),

"eid" : 3,

"ename" : "Nishant",

"sal" : 70000,

"city" : "Patna"

}

{

"\_id" : ObjectId("59b9688e18040d5dad8592c0"),

"eid" : 4,

"ename" : "yogesh",

"sal" : 80000,

"city" : "Nashik"

}

{

"\_id" : ObjectId("59b968ac18040d5dad8592c1"),

"eid" : 5,

"ename" : "Roshan",

"sal" : 60000,

"city" : "jalgaon"

}

{

"\_id" : ObjectId("59b968c218040d5dad8592c2"),

"eid" : 6,

"ename" : "Rohal",

"sal" : 20000,

"city" : "Pune"

}

{

"\_id" : ObjectId("59b968dd18040d5dad8592c3"),

"eid" : 7,

"ename" : "Ajay",

"sal" : 85000,

"city" : "Akola"

}