**31253 – Assignment 10**

db.createCollection('website');

db.website.insert({'roll':'1','name':'harsh','amount':1000,'url':'[www.yahoo.com](http://www.yahoo.com)'})

db.website.insert({'roll':'2','name':'jitesh','amount':2000,'url':'[www.yahoo.com](http://www.yahoo.com)'});

db.website.insert({'roll':'3','name':'rina','amount':3000,'url':'[www.google.com](http://www.google.com)'});

db.website.insert({'roll':'4','name':'ash','amount':4000,'url':'[www.gmail.com](http://www.gmail.com)'});

db.website.insert({'roll':'5','name':'ash','amount':1000,'url':'[www.pvg.com](http://www.pvg.com)'});

**1) Aggregation**

**SUM AGGREGATE**

db.website.aggregate({$group:{\_id:"$name","total":{$sum:"$amount"}}});{ "\_id" : "ash", "total" : 5000 }{ "\_id" : "rina", "total" : 3000 }{ "\_id" : "jitesh", "total" : 2000 }{ "\_id" : "harsh", "total" : 2000 }

**AVG AGGREGATE** db.website.aggregate({$group:{\_id:"$name","total":{$avg:"$amount"}}});{ "\_id" : "ash", "total" : 2500 }{ "\_id" : "rina", "total" : 3000 }{ "\_id" : "jitesh", "total" : 2000 }{ "\_id" : "harsh", "total" : 1000 }

**MIN AGGREGATION** db.website.aggregate({$group:{\_id:"$name","total":{$min:"$amount"}}});{ "\_id" : "ash", "total" : 1000 }{ "\_id" : "rina", "total" : 3000 }{ "\_id" : "jitesh", "total" : 2000 }{ "\_id" : "harsh", "total" : 1000 }

**MAX AGGREGATION** db.website.aggregate({$group:{\_id:"$name","total":{$max:"$amount"}}});{ "\_id" : "ash", "total" : 4000 }{ "\_id" : "rina", "total" : 3000 }{ "\_id" : "jitesh", "total" : 2000 }{ "\_id" : "harsh", "total" : 1000 }

**FIRST AGGREGATION** db.website.aggregate({$group:{\_id:"$name","total":{$first:"$amount"}}});{ "\_id" : "ash", "total" : 4000 }{ "\_id" : "rina", "total" : 3000 }{ "\_id" : "jitesh", "total" : 2000 }{ "\_id" : "harsh", "total" : 1000 }

**LAST AGGREGATION** db.website.aggregate({$group:{\_id:"$name","total":{$last:"$amount"}}});{ "\_id" : "ash", "total" : 1000 }{ "\_id" : "rina", "total" : 3000 }{ "\_id" : "jitesh", "total" : 2000 }{ "\_id" : "harsh", "total" : 1000 }

**PUSH AGGREGATION** db.website.aggregate({$group:{\_id:"$name","total":{$push:"$amount"}}});{ "\_id" : "ash", "total" : [ 4000, 1000 ] }{ "\_id" : "rina", "total" : [ 3000 ] }{ "\_id" : "jitesh", "total" : [ 2000 ] }{ "\_id" : "harsh", "total" : [ 1000, 1000 ] }

**COUNT AGGREGATION**

db.website.aggregate({$group:{\_id:"$name","total": {$sum:1}}});{ "\_id" : "ash", "total" : 2 }{ "\_id" : "rina", "total" : 1 }{ "\_id" : "jitesh", "total" : 1 }{ "\_id" : "harsh", "total" : 2 }

**ADDTOSET AGGREGATE** db.website.aggregate({$group:{\_id:"$name","total"{$addToSet:"$amount"}}});{ "\_id" : "ash", "total" : [ 1000, 4000 ] }{ "\_id" : "rina", "total" : [ 3000 ] }{ "\_id" : "jitesh", "total" : [ 2000 ] }{ "\_id" : "harsh", "total" : [ 1000]}

**2) Indexing**

db.createCollection('website1')

db.website1.insert({'r':1,'name':'harsh'});

db.website1.createIndex({'name':1})

**CREATE INDEXING**

db.website1.createIndex({'name':-1})

{

"createdCollectionAutomatically" : false,

"numIndexesBefore" : 2

,"numIndexesAfter" : 3,

"ok" : 1

}

db.website1.getIndexes()

[

{

"v" : 1,

"key" : {"\_id" : 1},

"name" : "\_id\_",

"ns" : "harsh.website1"

},

{

"v" : 1,

"key" : {"name" : 1},

"name" : "name\_1",

"ns" : "harsh.website1"

},

{

"v" : 1,

"key" : {"name" : -1},

"name" : "name\_-1",

"ns" : "harsh.website1”

}

]

**DROP INDEX**

db.website.dropIndex({'name':-1})

db.website1.dropIndex({'name':1})

db.website1.dropIndex({'name':1})

**GET INDEXING**

db.website1.getIndexes()[

{

"v" : 1,

"key" : {"\_id" : 1},

"name" : "\_id\_",

"ns" : "harsh.website1"

}

]

db.website1.find().pretty()

db.website1.createIndex({'name':1})

{

"createdCollectionAutomatically" : false,

"numIndexesBefore" : 1,

"numIndexesAfter" : 2,

"ok" : 1

}

db.website1.getIndexes()[

{

"v" : 1,

"key" : {"\_id" : 1},

"name" : "\_id\_",

"ns" : "harsh.website1"

},

{

"v" : 1,

"key" : {"name" : 1},

"name" : "name\_1",

"ns" : "harsh.website1"

}

]

db.website1.dropIndex({'name':1})