**1. Usage of aggregate functions**

**//USE DATABASE**

>use Ponnu

switched to db Ponnu

**//CREATE COLLECTION WEBSITE**

db.createCollection('website');

{ ok: 1 }

**//INSERT VALUES IN WEBSITE**

> db.website.insertMany([{'roll':'1','name':'harsh','amount':1000,'url':'www.yahoo.com'}, {'roll':'2','name':'jitesh','amount':2000,'url':'www.yahoo.com'},{'roll':'3','name':'rina','amount':3000,'url':'www.google.com'},{'roll':'4','name':'ash','amount':4000,'url':'www.gmail.com'},{'roll':'5','name':'ash','amount':5000,'url':'www.pvg.com'}]);

{

acknowledged: true,

insertedIds: {

'0': ObjectId('6626328e79d6fabc6c9f9915'),

'1': ObjectId('6626328e79d6fabc6c9f9916'),

'2': ObjectId('6626328e79d6fabc6c9f9917'),

'3': ObjectId('6626328e79d6fabc6c9f9918'),

'4': ObjectId('6626328e79d6fabc6c9f9919')

}

}

**//SUM AGGREGATE**

> db.website.aggregate({$group:{\_id:'$name','total':{$sum:'$amount'}}});

[

{ \_id: 'jitesh', total: 2000 },

{ \_id: 'harsh', total: 1000 },

{ \_id: 'rina', total: 3000 },

{ \_id: 'ash', total: 9000 }

]

**//AVG AGGREGATE**

> db.website.aggregate({$group:{\_id:'$name','total':{$avg:'$amount'}}});

[

{ \_id: 'rina', total: 3000 },

{ \_id: 'ash', total: 4500 },

{ \_id: 'jitesh', total: 2000 },

{ \_id: 'harsh', total: 1000 }

]

**//MIN AGGREGATION**

> db.website.aggregate({$group:{\_id:'$name','total':{$min:'$amount'}}});

[

{ \_id: 'rina', total: 3000 },

{ \_id: 'harsh', total: 1000 },

{ \_id: 'ash', total: 4000 },

{ \_id: 'jitesh', total: 2000 }

]

**//MAX AGGREGATION**

> db.website.aggregate({$group:{\_id:'$name','total':{$max:'$amount'}}});

[

{ \_id: 'rina', total: 3000 },

{ \_id: 'harsh', total: 1000 },

{ \_id: 'ash', total: 5000 },

{ \_id: 'jitesh', total: 2000 }

]

**//FIRST AGGREGATION**

> db.website.aggregate({$group:{\_id:'$name','total':{$first:'$amount'}}});

[

{ \_id: 'rina', total: 3000 },

{ \_id: 'ash', total: 4000 },

{ \_id: 'harsh', total: 1000 },

{ \_id: 'jitesh', total: 2000 }

]

**//LAST AGGREGATION**

> db.website.aggregate({$group:{\_id:'$name','total':{$last:'$amount'}}});

[

{ \_id: 'harsh', total: 1000 },

{ \_id: 'ash', total: 5000 },

{ \_id: 'jitesh', total: 2000 },

{ \_id: 'rina', total: 3000 }

]

**//PUSH AGGREGATION**

> db.website.aggregate({$group:{\_id:'$name','total':{$push:'$amount'}}});

[

{ \_id: 'rina', total: [ 3000 ] },

{ \_id: 'ash', total: [ 4000, 5000 ] },

{ \_id: 'jitesh', total: [ 2000 ] },

{ \_id: 'harsh', total: [ 1000 ] }

]

**//COUNT AGGREGATION**

> db.website.aggregate({$group:{\_id:'$name','total':{$sum:1}}});

[

{ \_id: 'harsh', total: 1 },

{ \_id: 'rina', total: 1 },

{ \_id: 'ash', total: 2 },

{ \_id: 'jitesh', total: 1 }

]

**//ADDTOSET AGGREGATE**

> db.website.aggregate({$group:{\_id:'$name','total':{$addToSet:'$amount'}}});

[

{ \_id: 'jitesh', total: [ 2000 ] },

{ \_id: 'ash', total: [ 5000, 4000 ] },

{ \_id: 'rina', total: [ 3000 ] },

{ \_id: 'harsh', total: [ 1000 ] }

]