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db.purchase_orders.insertMany(
[
    {product: "toothbrush", total: 4.75, customer: "Mike"},
    {product: "guitar", total: 199.99, customer: "Tom"},
    {product: "milk", total: 11.33, customer: "Mike"},
    {product: "pizza", total: 8.50, customer: "Karen"},
    {product: "toothbrush", total: 4.75, customer: "Karen"},
    {product: "pizza", total: 4.75, customer: "Dave"}
]
);
{
    "acknowledged" : true,
    "insertedIds" : [
        ObjectId("635ff445fa84c7f12ebc8e6d"),
        ObjectId("635ff445fa84c7f12ebc8e6e"),
        ObjectId("635ff445fa84c7f12ebc8e6f"),
        ObjectId("635ff445fa84c7f12ebc8e70"),
        ObjectId("635ff445fa84c7f12ebc8e71"),
        ObjectId("635ff445fa84c7f12ebc8e72")
    ]
}
db.purchase_orders.aggregate(
[
    {$match:{product:{$in:['toothbrush','pizza']}}},
    {$group:{_id:'$product', earnings:{$sum:"$total"}}}
]
)
{ "_id" : "toothbrush", "earnings" : 9.5 }
{ "_id" : "pizza", "earnings" : 13.25 }
db.purchase_orders.find({product:"toothbrush"}).count();
2
db.purchase_orders.distinct("product");
[ "guitar", "milk", "pizza", "toothbrush" ]
db.purchase_orders.aggregate(
[
    {
        $group : {
            _id:"$customer",
            moneyspent:{$sum: "$total"}
        }
    }
]
)
{ "_id" : "Dave", "moneyspent" : 4.75 }
{ "_id" : "Tom", "moneyspent" : 199.99 }
{ "_id" : "Karen", "moneyspent" : 13.25 }
{ "_id" : "Mike", "moneyspent" : 16.08 }
db.purchase_orders.aggregate(
[
    {$project: {_id: 0,"product":1}},
    {$sort: {total: 1}},
    {$limit: 1}
]
);
{ "product" : "toothbrush" }
db.purchase_orders.aggregate(
[
    {$group: {_id: "$product", totalMoneySpent: {$sum: "$total"}}},
    {$sort: {"totalMoneySpent": 1}}
]
)

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]
);
{ "_id" : "toothbrush", "totalMoneySpent" : 9.5 }
{ "_id" : "pizza", "totalMoneySpent" : 13.25 }
{ "_id" : "guitar", "totalMoneySpent" : 199.99 }
{ "_id" : "milk", "totalMoneySpent" : 11.33 }
db.purchase_orders.aggregate(
[
    {$match:{product:"toothbrush"}},
    {$group:{_id:"$customer", countOfToothbrush:{$count:{}}}},
    {$sort:{countOfToothbrush: -1}},
    {$limit: 1}
]
)
{ "_id" : "Mike", "countOfToothbrush" : 1 }
////////////////////////////////////
db.teachers.createIndex({empId:1})
{
    "numIndexesBefore" : 1,
    "numIndexesAfter" : 2,
    "createdCollectionAutomatically" : false,
    "ok" : 1
}
db.teachers.getIndexes()
[
    {
        "v" : 2,
        "key" : {
            "_id" : 1
        },
        "name" : "_id_"
    },
    {
        "v" : 2,
        "key" : {
            "empId" : 1
        },
        "name" : "empId_1"
    }
]
db.collection.dropIndexes()
{
    "nIndexesWas" : 1,
    "msg" : "non-_id indexes dropped for collection",
    "ok" : 1
}
db.teachers.createIndex({"empId":1, "name":1})
{
    "numIndexesBefore" : 2,
    "numIndexesAfter" : 3,
    "createdCollectionAutomatically" : false,
    "ok" : 1
}
db.teachers.getIndexes()
[
    {
        "v" : 2,
        "key" : {
            "_id" : 1

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    },
    "name" : "_id_"
  },
  {
    "v" : 2,
    "key" : {
      "empId" : 1
    },
    "name" : "empId_1"
  },
  {
    "v" : 2,
    "key" : {
      "empId" : 1,
      "name" : 1
    },
    "name" : "empId_1_name_1"
  }
]
{
  "nIndexesWas" : 2,
  "msg" : "non-_id indexes dropped for collection",
  "ok" : 1
}
db.teachers.createIndex({"empId":1}, {unique:true})
{
  "numIndexesBefore" : 1,
  "numIndexesAfter" : 2,
  "createdCollectionAutomatically" : false,
  "ok" : 1
}

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