**>db.createCollection("productss")**

{ "ok" : 1 }

>**db.Productss.insert({name:"Mobile",company:"Samsung",cost:8500});** WriteResult({ "nInserted" : 1 })

>db.Productss.insert({name:"Laptop",company:"HP",cost:45000}); WriteResult({ "nInserted" : 1 })

>db.Productss.insert({name:"Washing

Machine",company:"Panesonic",cost:13000})

WriteResult({ "nInserted" : 1 })

**>db.Productss.find().pretty();**

{

"\_id" : ObjectId("6524d21299c4c18ba0de36a1"),

"name" : "Mobile",

"company" : "Samsung",

"cost" : 8500

}

{

"\_id" : ObjectId("6524d22999c4c18ba0de36a2"),

"name" : "Laptop",

"company" : "HP",

"cost" : 45000

}

{

"\_id" : ObjectId("6524d24799c4c18ba0de36a3"),

"name" : "Washing Machine",

"company" : "Panesonic",

"cost" : 13000

}

**>db.Productss.aggregate({$group:{\_id:"$company","maxPrice":{$max:"$cost"},"minPrice":{$min:"$cost"}}})**

{ "\_id" : "Panesonic", "maxPrice" : 13000, "minPrice" : 13000 } { "\_id" : "HP", "maxPrice" : 45000, "minPrice" : 45000 }

{ "\_id" : "Samsung", "maxPrice" : 8500, "minPrice" : 8500 }

**>db.Productss.aggregate([{$sort:{company:1}}]).pretty()**

{

"\_id" : ObjectId("6524d22999c4c18ba0de36a2"),

"name" : "Laptop",

"company" : "HP",

"cost" : 45000

}

{

"\_id" : ObjectId("6524d24799c4c18ba0de36a3"),

"name" : "Washing Machine",

"company" : "Panesonic",

"cost" : 13000

}

{

"\_id" : ObjectId("6524d21299c4c18ba0de36a1"),

"name" : "Mobile",

"company" : "Samsung",

"cost" : 8500

}

**> db.Productss.count();**

3

**>db.Productss.distinct("company");**

[ "Samsung", "HP", "Panesonic" ]

**7. Display company name with its count for documents**

**>db.Productss.find().limit(1).pretty()**

{

"\_id" : ObjectId("6524d21299c4c18ba0de36a1"),

"name" : "Mobile",

"company" : "Samsung",

"cost" : 8500

**>db.Productss.find().skip(2).pretty();**

{

"\_id" : ObjectId("6524d24799c4c18ba0de36a3"),

"name" : "Washing Machine",

"company" : "Panesonic",

"cost" : 13000

}

**>for (var i = 1; i <= 10; i++) {**

**... db.staff.insert({**

**... Staff\_id: i,**

**... staff\_name: "StaffName" + i,**

**... age: Math.floor(Math.random() \* 30) + 20 // Generate a random age between  20 and 49**

**... });**

**... }**

WriteResult({ "nInserted" : 1 })

**>db.staff.find().pretty();**

{

"\_id" : ObjectId("6524d6ee99c4c18ba0de36a4"),

"Staff\_id" : 1,

"staff\_name" : "StaffName1",

"age" : 32

}

{

"\_id" : ObjectId("6524d6ee99c4c18ba0de36a5"), "Staff\_id" : 2,

"staff\_name" : "StaffName2",

"age" : 31

}

{

"\_id" : ObjectId("6524d6ee99c4c18ba0de36a6"), "Staff\_id" : 3,

"staff\_name" : "StaffName3",

"age" : 35

}

{

"\_id" : ObjectId("6524d6ee99c4c18ba0de36a7"), "Staff\_id" : 4,

"staff\_name" : "StaffName4",

"age" : 27

}

{

"\_id" : ObjectId("6524d6ee99c4c18ba0de36a8"), "Staff\_id" : 5,

"staff\_name" : "StaffName5",

"age" : 26

}

{

"\_id" : ObjectId("6524d6ee99c4c18ba0de36a9"), "Staff\_id" : 6,

"staff\_name" : "StaffName6",

"age" : 22

}

{

"\_id" : ObjectId("6524d6ee99c4c18ba0de36aa"), "Staff\_id" : 7,

"staff\_name" : "StaffName7",

"age" : 31

}

{

"\_id" : ObjectId("6524d6ee99c4c18ba0de36ab"),

"Staff\_id" : 8,

"staff\_name" : "StaffName8",

"age" : 24

}

{

"\_id" : ObjectId("6524d6ee99c4c18ba0de36ac"),

"Staff\_id" : 9,

"staff\_name" : "StaffName9",

"age" : 36

}

{

"\_id" : ObjectId("6524d6ee99c4c18ba0de36ad"),

"Staff\_id" : 10,

"staff\_name" : "StaffName10",

"age" : 22

}

**> db.staff.find({Staff\_id:2}).pretty();**

{

"\_id" : ObjectId("6524d6ee99c4c18ba0de36a5"),

"Staff\_id" : 2,

"staff\_name" : "StaffName2",

"age" : 31

}

**>db.staff.find({staff\_name:"StaffName10",age:22}).pretty();**

{

"\_id" : ObjectId("6524d6ee99c4c18ba0de36ad"),

"Staff\_id" : 10,

"staff\_name" : "StaffName10",

"age" : 22

}

**12. create index on staff\_name**

**>db.staff.ensureIndex({staff\_name:1});**

{

"createdCollectionAutomatically" : false,

"numIndexesBefore" : 1,

"numIndexesAfter" : 2,

"ok" : 1

}

**>db.staff.find({staff\_name:"StaffName10",age:22}).pretty();**

{

"\_id" : ObjectId("6524d6ee99c4c18ba0de36ad"),

"Staff\_id" : 10,

"staff\_name" : "StaffName10",

"age" : 22

}

**>db.staff.ensureIndex({age:1,staff\_name:1});**

{

"createdCollectionAutomatically" : false,

"numIndexesBefore" : 2,

"numIndexesAfter" : 3,

"ok" : 1

}

**>db.staff.getIndexes()**

[

{

"v" : 1,

"key" : {

"\_id" : 1

},

"name" : "\_id\_",

"ns" : "productss.staff"

},

{

"v" : 1,

"key" : {

"staff\_name" : 1

},

"name" : "staff\_name\_1",

"ns" : "productss.staff"

},

{

"v" : 1,

"key" : {

"age" : 1,

"staff\_name" : 1

},

"name" : "age\_1\_staff\_name\_1",

"ns" : "productss.staff"

}

]

**>db.staff.getIndexes();**

[

{

"v" : 1,

"key" : {

"\_id" : 1

},

"name" : "\_id\_",

"ns" : "productss.staff"

},

{

"v" : 1,

"key" : {

"staff\_name" : 1

},

"name" : "staff\_name\_1",

"ns" : "productss.staff"

}

]

**> db.staff.dropIndex({staff\_name:1,age:1});**

{

"nIndexesWas" : 3,

"ok" : 0,

"errmsg" : "can't find index with key:{ staff\_name: 1.0, age: 1.0 }" }

**>db.staff.dropIndex({staff\_name:1});**

{ "nIndexesWas" : 3, "ok" : 1 }