Chit 4 –

use india

db.createCollection("city")

db.city.insert([

... {

... "city": "Pune",

... "type": "Urban",

... "state": "MH",

... "population": 5600000

... },

... {

... "city": "Mumbai",

... "type": "Urban",

... "state": "MH",

... "population": 78100000

... },

... {

... "city": "Nashik",

... "type": "Urban",

... "state": "MH",

... "population": 54761000

... },

... {

... "city": "Ahmedabad",

... "type": "Urban",

... "state": "GJ",

... "population": 23145670

... },

... {

... "city": "Surat",

... "type": "Urban",

... "state": "GJ",

... "population": 45179410

... },

... {

... "city": "aurangabad",

... "type": "Rural",

... "state": "MH",

... "population": 12000000

... },

... {

... "city": "Thane",

... "type": "Rural",

... "state": "MH",

... "population": 19000000

... },

... {

... "city": "Deoli",

... "type": "Rural",

... "state": "MH",

... "population": 16000

... },

... {

... "city": "Bhopal",

... "type": "Urban",

... "state": "MP",

... "population": 18000000

... },

... {

... "city": "Ashoknagar",

... "type": "Rural",

... "state": "MP",

... "population": 845071

... }

... ])

QUERIES

• -using mapreduce, find statewise population

var map = function() {emit(this.state,this.population)}

var reduce = function(key, values) {return Array.sum(values)}

db.city.mapReduce(map, reduce, {out : 'statewise'})

db.statewise.find().pretty()

• -using mapreduce, find citywise population

var map = function() {emit(this.city, this.population)}

var reduce = function(key, values) {return Array.sum(values)}

db.city.mapReduce(map, reduce, {out : 'citywise'})

db.citywise.find().pretty()

• -using mapreduce, find typewise population.

var map = function() {emit(this.type, this.population)}

var reduce = function(key, values) {return Array.sum(values)}

db.city.mapReduce(map, reduce, {out : 'typewise'})

db.typewise.find().pretty()

• -using mapreduce , find citywise count.

var map = function() {emit(this.city, this.\_id)}

var reduce = function(key, values) {return values.length}

db.city.mapReduce(map, reduce, {out : 'citywise\_count'})

db.citywise\_count.find().pretty()

• using mapreduce , find statewise count.

var map = function() {emit(this.state, this.\_id)}

var reduce = function(key, values) {return values.length}

db.city.mapReduce(map, reduce, {out : 'statewise\_count'})

db.statewise\_count.find().pretty()