

/***** SET A – Q2 Newspaper / Publisher DB *****/

//Insert

```
db.newspapers.insertMany([
  { name:"Daily Nashik Times",city:"NASHIK",lang:"English",sale:5000,state:"Maharashtra" },
  { name:"Marathi Dainik",city:"Pune",lang:"Marathi",sale:8000,state:"Maharashtra" },
  { name:"Gujrat Today",city:"Surat",lang:"Gujarati",sale:4000,state:"Gujrat" },
  { name:"Metro Marathi",city:"NASHIK",lang:"Marathi",sale:9000,state:"Maharashtra" },
  { name:"India Express",city:"Mumbai",lang:"English",sale:7000,state:"Maharashtra" }
]);
```

```
db.publishers.insertMany([
  { pname:"P1",state:"Gujrat" },
  { pname:"P2",state:"Maharashtra" },
  { pname:"P3",state:"Gujrat" },
  { pname:"P4",state:"Delhi" },
  { pname:"P5",state:"Gujrat" }
]);
```

//a List newspapers in NASHIK

```
db.newspapers.find({city:"NASHIK"});
```

//b List Marathi newspapers

```
db.newspapers.find({lang:"Marathi"});
```

//c Count publishers in Gujrat

```
db.publishers.count({state:"Gujrat"});
```

//d Cursor: highest sale in Maharashtra

```
var c=db.newspapers.find({state:"Maharashtra"}).sort({sale:-1}).limit(1);
while(c.hasNext()){printjson(c.next());}
```

/***** SET B – Q2 Employee / Department DB *****/

//Insert

```
db.emp.insertMany([
  {name:"A",dept:"Sales",salary:60000},
  {name:"B",dept:"IT",salary:45000},
  {name:"C",dept:"Sales",salary:70000},
  {name:"D",dept:"HR",salary:30000},
  {name:"E",dept:"IT",salary:80000}
]);
```

```
db.dept.insertMany([
  {dname:"Sales",count:2},
  {dname:"IT",count:2},
  {dname:"HR",count:1}
]);
```

//a Employee with highest salary

```
db.emp.find().sort({salary:-1}).limit(1);
```

```
//b Biggest department
db.dept.find().sort({count:-1}).limit(1);

//c Cursor dept-wise employees
var c=db.emp.find().sort({dept:1});
while(c.hasNext()){printjson(c.next());}

//d Sales employees salary>50000
db.emp.find({dept:"Sales",salary:{$gt:50000}});
```

/***** SET C – Q2 Employee–Project DB *****/

```
//Insert
db.proj.insertMany([
{name:"P1",type:"Web",duration:4},
{name:"P2",type:"AI",duration:2},
{name:"P3",type:"Web",duration:6},
{name:"P4",type:"ML",duration:3},
{name:"P5",type:"Cloud",duration:5}
]);

db.emp_proj.insertMany([
{name:"Mr. Patil",project:"P1"},
{name:"A",project:"P3"},
{name:"B",project:"P2"},
{name:"C",project:"P1"},
{name:"D",project:"P5"}
]);

//a List projects where type=Web
db.proj.find({type:"Web"});

//b Projects with duration>3
db.proj.find({duration:{$gt:3}});

//c Count employees on P1
db.emp_proj.count({project:"P1"});

//d Projects Mr. Patil works on
db.emp_proj.find({name:"Mr. Patil"},{project:1});
```

/***** SET D – Q2 Inventory DB *****/

```
//Insert
db.items.insertMany([
{name:"Planner",qty:10,tags:4,status:"B",height:9},
{name:"Book",qty:400,tags:2,status:"A",height:6},
{name:"Pen",qty:50,tags:6,status:"B",height:9},
{name:"Box",qty:500,tags:3,status:"C",height:12},
{name:"Bag",qty:20,tags:1,status:"B",height:10}
]);
```

```

db.warehouse.insertMany([
  {wh:"W1",item:"Planner",qty:15},
  {wh:"W2",item:"Planner",qty:5},
  {wh:"W3",item:"Book",qty:200},
  {wh:"W4",item:"Pen",qty:30},
  {wh:"W5",item:"Bag",qty:20}
]);

//a Items qty>300
db.items.find({qty:{$gt:300}});

//b Items tags<5
db.items.find({tags:{$lt:5}});

//c status="B" OR qty<50 AND height>8
db.items.find({$or:[{status:"B"},{qty:{$lt:50},height:{$gt:8}}]});

//d Warehouses keeping Planner qty<20
db.warehouse.find({item:"Planner",qty:{$lt:20}});

```

/***** SET E – Q2 Customer Loan DB *****/

```

//Insert
db.cust.insertMany([
  {name:"David",city:"Pimpri",loan_amt:90000},
  {name:"Dilip",city:"Pune",loan_amt:120000},
  {name:"Daniel",city:"Pimpri",loan_amt:50000},
  {name:"Mr. Patil",city:"Mumbai",loan_amt:150000},
  {name:"Asha",city:"Pimpri",loan_amt:200000},
  {name:"Dev",city:"Pimpri",loan_amt:70000},
  {name:"Ravi",city:"Nashik",loan_amt:60000},
  {name:"Deepak",city:"Pimpri",loan_amt:90000},
  {name:"Komal",city:"Pune",loan_amt:40000},
  {name:"Varun",city:"Pimpri",loan_amt:110000}
]);

//a Name starts with D
db.cust.find({name:/^D/});

//b Pimpri customers in descending order
db.cust.find({city:"Pimpri"}).sort({name:-1});

//c Max loan customer
db.cust.find().sort({loan_amt:-1}).limit(1);

//d Update address of Mr.Patil loan>100000
db.cust.updateOne(
  {name:"Mr. Patil",loan_amt:{$gt:100000}},
  {$set:{city:"Updated Address"}}
);

```