

NAME: Mansi Uddhav Jadhav

ROLLNO: 26

SUBJECT: ADBMS-Assignment 1

Show Databases:

```
test> show databases
```

```
admin  40.00 KiB
```

```
config 84.00 KiB
```

```
local  80.00 KiB
```

```
mansi  40.00 KiB
```

Use Databases:

```
test> use mansi
```

```
switched to db mansi
```

Create Collection:

```
mansi> db.createCollection("ITstudent")
```

```
{ ok: 1 }
```

```
mansi> show collections;
```

```
ITstudent
```

```
student
```

```
TEstud
```

Insert:

```
mansi> db.ITstudent.insert({st_id:1,Name:"Mansi",Address:"Pune",Branch:"It"});
```

```
DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or bulkWrite.
```

```
{
```

```
  acknowledged: true,
```

```
  insertedIds: { '0': ObjectId("63261ed311ecd899a0b7e9a4") }
```

```
}
```

```
mansi> db.ITstudent.insert({st_id:2,Name:"Ankita",Address:"Mumbai",Branch:"It"});
```

```
{
```

```
  acknowledged: true,
```

```
  insertedIds: { '0': ObjectId("63261f0811ecd899a0b7e9a5") }
```

```
}
mansi> db.ITstudent.insert({st_id:3,Name:"Yash",Address:"Satara",Branch:"CS"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63261f2911ecd899a0b7e9a6") }
}
mansi> db.ITstudent.insert({st_id:4,Name:"Nikita",Address:"Nashik",Branch:"CS"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63261f4811ecd899a0b7e9a7") }
}
mansi> db.ITstudent.insert({st_id:5,Name:"Khushi",Address:"Pune",Branch:"E&Tc"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63261f7611ecd899a0b7e9a8") }
}
mansi> db.ITstudent.insert({st_id:6,Name:"Niraj",Address:"Delhi",Branch:"E&Tc"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63261f9411ecd899a0b7e9a9") }
}
mansi> db.ITstudent.insert({st_id:7,Name:"Amit",Address:"Kalyan",Branch:"IT"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63261fc911ecd899a0b7e9aa") }
}
mansi> db.ITstudent.insert({st_id:8,Name:"Asavari",Address:"Latur",Branch:"CS"});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63261ff311ecd899a0b7e9ab") }
```

Find:

```
mansi> db.ITstudent.find().pretty();
```

```
[
  {
    _id: ObjectId("63261ed311ecd899a0b7e9a4"),
    st_id: 1,
    Name: 'Mansi',
    Address: 'Pune',
    Branch: 'It'
  },
  {
    _id: ObjectId("63261f0811ecd899a0b7e9a5"),
    st_id: 2,
    Name: 'Ankita',
    Address: 'Mumbai',
    Branch: 'It'
  },
  {
    _id: ObjectId("63261f2911ecd899a0b7e9a6"),
    st_id: 3,
    Name: 'Yash',
    Address: 'Satara',
    Branch: 'CS'
  },
  {
    _id: ObjectId("63261f4811ecd899a0b7e9a7"),
    st_id: 4,
    Name: 'Nikita',
    Address: 'Nashik',
    Branch: 'CS'
  },
  {
```

```
_id: ObjectId("63261f7611ecd899a0b7e9a8"),
st_id: 5,
Name: 'Khushi',
Address: 'Pune',
Branch: 'E&Tc'
},
{
_id: ObjectId("63261f9411ecd899a0b7e9a9"),
st_id: 6,
Name: 'Niraj',
Address: 'Delhi',
Branch: 'E&Tc'
},
{
_id: ObjectId("63261fc911ecd899a0b7e9aa"),
st_id: 7,
Name: 'Amit',
Address: 'Kalyan',
Branch: 'IT'
},
{
_id: ObjectId("63261ff311ecd899a0b7e9ab"),
st_id: 8,
Name: 'Asavari',
Address: 'Latur',
Branch: 'CS'
}
]
```

Remove:

```
mansi> db.ITstudent.remove({st_id:3});
```

DeprecationWarning: Collection.remove() is deprecated. Use deleteOne, deleteMany, findOneAndDelete, or bulkWrite.

```
{ acknowledged: true, deletedCount: 1 }
```

```
mansi> db.ITstudent.find().pretty();
```

```
[
  {
    _id: ObjectId("63261ed311ecd899a0b7e9a4"),
    st_id: 1,
    Name: 'Mansi',
    Address: 'Pune',
    Branch: 'It'
  },
  {
    _id: ObjectId("63261f0811ecd899a0b7e9a5"),
    st_id: 2,
    Name: 'Ankita',
    Address: 'Mumbai',
    Branch: 'It'
  },
  {
    _id: ObjectId("63261f4811ecd899a0b7e9a7"),
    st_id: 4,
    Name: 'Nikita',
    Address: 'Nashik',
    Branch: 'CS'
  },
  {
    _id: ObjectId("63261f7611ecd899a0b7e9a8"),
    st_id: 5,
    Name: 'Khushi',
    Address: 'Pune',
```

```

    Branch: 'E&Tc'
  },
  {
    _id: ObjectId("63261f9411ecd899a0b7e9a9"),
    st_id: 6,
    Name: 'Niraj',
    Address: 'Delhi',
    Branch: 'E&Tc'
  },
  {
    _id: ObjectId("63261fc911ecd899a0b7e9aa"),
    st_id: 7,
    Name: 'Amit',
    Address: 'Kalyan',
    Branch: 'IT'
  },
  {
    _id: ObjectId("63261ff311ecd899a0b7e9ab"),
    st_id: 8,
    Name: 'Asavari',
    Address: 'Latur',
    Branch: 'CS'
  }
]

```

Update:

```
mansi> db.ITstudent.update({Name:"Nikita"},{$set:{Name:"Sneha"},upsert:true});
```

DeprecationWarning: Collection.update() is deprecated. Use updateOne, updateMany, or bulkWrite.

```

{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,

```

```
modifiedCount: 1,
upsertedCount: 0
}
mansi> db.ITstudent.find().pretty();
[
  {
    _id: ObjectId("63261ed311ecd899a0b7e9a4"),
    st_id: 1,
    Name: 'Mansi',
    Address: 'Pune',
    Branch: 'It'
  },
  {
    _id: ObjectId("63261f0811ecd899a0b7e9a5"),
    st_id: 2,
    Name: 'Ankita',
    Address: 'Mumbai',
    Branch: 'It'
  },
  {
    _id: ObjectId("63261f4811ecd899a0b7e9a7"),
    st_id: 4,
    Name: 'Sneha',
    Address: 'Nashik',
    Branch: 'CS',
    upsert: true
  },
  {
    _id: ObjectId("63261f7611ecd899a0b7e9a8"),
    st_id: 5,
    Name: 'Khushi',
```

```

    Address: 'Pune',
    Branch: 'E&Tc'
  },
  {
    _id: ObjectId("63261f9411ecd899a0b7e9a9"),
    st_id: 6,
    Name: 'Niraj',
    Address: 'Delhi',
    Branch: 'E&Tc'
  },
  {
    _id: ObjectId("63261fc911ecd899a0b7e9aa"),
    st_id: 7,
    Name: 'Amit',
    Address: 'Kalyan',
    Branch: 'IT'
  },
  {
    _id: ObjectId("63261ff311ecd899a0b7e9ab"),
    st_id: 8,
    Name: 'Asavari',
    Address: 'Latur',
    Branch: 'CS'
  }
]

```

Or:

```

mansi> db.ITstudent.find({$or:[{Address:"Pune"},{Branch:"E&TC"}]}).pretty();
[
  {
    _id: ObjectId("63261ed311ecd899a0b7e9a4"),
    st_id: 1,

```



```

    Name: 'Mansi',
    Address: 'Pune',
    Branch: 'It'
  },
  {
    _id: ObjectId("63261f7611ecd899a0b7e9a8"),
    st_id: 5,
    Name: 'Khushi',
    Address: 'Pune',
    Branch: 'E&Tc'
  }
]

```

And:

```
mansi> db.ITstudent.find({$and:[{st_id:{$ne:1}},{st_id:{$exists:true}}]}).pretty();
```

```

[
  {
    _id: ObjectId("63261f0811ecd899a0b7e9a5"),
    st_id: 2,
    Name: 'Ankita',
    Address: 'Mumbai',
    Branch: 'It'
  },
  {
    _id: ObjectId("63261f4811ecd899a0b7e9a7"),
    st_id: 4,
    Name: 'Sneha',
    Address: 'Nashik',
    Branch: 'CS',
    upsert: true
  },
  {

```

```

    _id: ObjectId("63261f7611ecd899a0b7e9a8"),
    st_id: 5,
    Name: 'Khushi',
    Address: 'Pune',
    Branch: 'E&Tc'
  },
  {
    _id: ObjectId("63261f9411ecd899a0b7e9a9"),
    st_id: 6,
    Name: 'Niraj',
    Address: 'Delhi',
    Branch: 'E&Tc'
  },
  {
    _id: ObjectId("63261fc911ecd899a0b7e9aa"),
    st_id: 7,
    Name: 'Amit',
    Address: 'Kalyan',
    Branch: 'IT'
  },
  {
    _id: ObjectId("63261ff311ecd899a0b7e9ab"),
    st_id: 8,
    Name: 'Asavari',
    Address: 'Latur',
    Branch: 'CS'
  }
]

```

Equal:

```
mansi> db.ITstudent.find({st_id:{Seq:6}}).pretty();
```

```
[
```

```
{
  _id: ObjectId("63261f9411ecd899a0b7e9a9"),
  st_id: 6,
  Name: 'Niraj',
  Address: 'Delhi',
  Branch: 'E&Tc'
}
]
```

Not Equal:

```
mansi> db.ITstudent.find({Branch:{$ne:"CS"}}).pretty();
```

```
[
{
  _id: ObjectId("63261ed311ecd899a0b7e9a4"),
  st_id: 1,
  Name: 'Mansi',
  Address: 'Pune',
  Branch: 'It'
},
{
  _id: ObjectId("63261f0811ecd899a0b7e9a5"),
  st_id: 2,
  Name: 'Ankita',
  Address: 'Mumbai',
  Branch: 'It'
},
{
  _id: ObjectId("63261f7611ecd899a0b7e9a8"),
  st_id: 5,
  Name: 'Khushi',
  Address: 'Pune',
  Branch: 'E&Tc'
}
```

```
},
{
  _id: ObjectId("63261f9411ecd899a0b7e9a9"),
  st_id: 6,
  Name: 'Niraj',
  Address: 'Delhi',
  Branch: 'E&Tc'
},
{
  _id: ObjectId("63261fc911ecd899a0b7e9aa"),
  st_id: 7,
  Name: 'Amit',
  Address: 'Kalyan',
  Branch: 'IT'
}
]
```

Greater Than:

```
mansi> db.ITstudent.find({st_id:{$gt:5}}).pretty();
```

```
[
  {
    _id: ObjectId("63261f9411ecd899a0b7e9a9"),
    st_id: 6,
    Name: 'Niraj',
    Address: 'Delhi',
    Branch: 'E&Tc'
  },
  {
    _id: ObjectId("63261fc911ecd899a0b7e9aa"),
    st_id: 7,
    Name: 'Amit',
    Address: 'Kalyan',

```

```
    Branch: 'IT'
  },
  {
    _id: ObjectId("63261ff311ecd899a0b7e9ab"),
    st_id: 8,
    Name: 'Asavari',
    Address: 'Latur',
    Branch: 'CS'
  }
]
```

Greater Than Equal to:

```
mansi> db.ITstudent.find({st_id:{$gte:6}}).pretty();
```

```
[
  {
    _id: ObjectId("63261f9411ecd899a0b7e9a9"),
    st_id: 6,
    Name: 'Niraj',
    Address: 'Delhi',
    Branch: 'E&Tc'
  },
  {
    _id: ObjectId("63261fc911ecd899a0b7e9aa"),
    st_id: 7,
    Name: 'Amit',
    Address: 'Kalyan',
    Branch: 'IT'
  },
  {
    _id: ObjectId("63261ff311ecd899a0b7e9ab"),
    st_id: 8,
    Name: 'Asavari',

```

```
    Address: 'Latur',
    Branch: 'CS'
  }
]
```

Less Than:

```
mansi> db.ITstudent.find({st_id:{$lt:5}}).pretty();
[
  {
    _id: ObjectId("63261ed311ecd899a0b7e9a4"),
    st_id: 1,
    Name: 'Mansi',
    Address: 'Pune',
    Branch: 'It'
  },
  {
    _id: ObjectId("63261f0811ecd899a0b7e9a5"),
    st_id: 2,
    Name: 'Ankita',
    Address: 'Mumbai',
    Branch: 'It'
  },
  {
    _id: ObjectId("63261f4811ecd899a0b7e9a7"),
    st_id: 4,
    Name: 'Sneha',
    Address: 'Nashik',
    Branch: 'CS',
    upsert: true
  }
]

mansi> db.ITstudent.find({st_id:{$lt:2}}).pretty();
```

```
[
  {
    _id: ObjectId("63261ed311ecd899a0b7e9a4"),
    st_id: 1,
    Name: 'Mansi',
    Address: 'Pune',
    Branch: 'It'
  }
]
```

Less Than Equal to:

```
mansi> db.ITstudent.find({st_id:{$lte:2}}).pretty();
```

```
[
  {
    _id: ObjectId("63261ed311ecd899a0b7e9a4"),
    st_id: 1,
    Name: 'Mansi',
    Address: 'Pune',
    Branch: 'It'
  },
  {
    _id: ObjectId("63261f0811ecd899a0b7e9a5"),
    st_id: 2,
    Name: 'Ankita',
    Address: 'Mumbai',
    Branch: 'It'
  }
]
```

Not:

```
mansi> db.ITstudent.find({st_id:{$not:{$gte:3}}}).pretty();
```

```
[
  {
```

```
_id: ObjectId("63261ed311ecd899a0b7e9a4"),
st_id: 1,
Name: 'Mansi',
Address: 'Pune',
Branch: 'It'
},
{
  _id: ObjectId("63261f0811ecd899a0b7e9a5"),
  st_id: 2,
  Name: 'Ankita',
  Address: 'Mumbai',
  Branch: 'It'
}
]
```

Cursor:

```
mansi> var mycursor=db.ITstudent.find({Name:"Asavari"}).pretty();
```

```
mansi> mycursor;
```

```
[
  {
    _id: ObjectId("63261ff311ecd899a0b7e9ab"),
    st_id: 8,
    Name: 'Asavari',
    Address: 'Latur',
    Branch: 'CS'
  }
]
```

Sort: 1)Ascending

```
mansi> db.ITstudent.find().sort({key:1}).pretty();
```

```
[
  {
```



```
_id: ObjectId("63261ed311ecd899a0b7e9a4"),
st_id: 1,
Name: 'Mansi',
Address: 'Pune',
Branch: 'It'
},
{
_id: ObjectId("63261f0811ecd899a0b7e9a5"),
st_id: 2,
Name: 'Ankita',
Address: 'Mumbai',
Branch: 'It'
},
{
_id: ObjectId("63261f4811ecd899a0b7e9a7"),
st_id: 4,
Name: 'Sneha',
Address: 'Nashik',
Branch: 'CS',
upsert: true
},
{
_id: ObjectId("63261f7611ecd899a0b7e9a8"),
st_id: 5,
Name: 'Khushi',
Address: 'Pune',
Branch: 'E&Tc'
},
{
_id: ObjectId("63261f9411ecd899a0b7e9a9"),
st_id: 6,
```

```

    Name: 'Niraj',
    Address: 'Delhi',
    Branch: 'E&Tc'
  },
  {
    _id: ObjectId("63261fc911ecd899a0b7e9aa"),
    st_id: 7,
    Name: 'Amit',
    Address: 'Kalyan',
    Branch: 'IT'
  },
  {
    _id: ObjectId("63261ff311ecd899a0b7e9ab"),
    st_id: 8,
    Name: 'Asavari',
    Address: 'Latur',
    Branch: 'CS'
  }
]

```

Skip:

```
mansi> db.ITstudent.find({st_id:{$gt:3}}).limit(3).skip(3).pretty();
```

```

[
  {
    _id: ObjectId("63261fc911ecd899a0b7e9aa"),
    st_id: 7,
    Name: 'Amit',
    Address: 'Kalyan',
    Branch: 'IT'
  },
  {
    _id: ObjectId("63261ff311ecd899a0b7e9ab"),

```

```
st_id: 8,  
Name: 'Asavari',  
Address: 'Latur',  
Branch: 'CS'  
}  
]
```

Limit:

```
mansi> db.ITstudent.find().limit(4).pretty();
```

```
[
  {
    _id: ObjectId("63261ed311ecd899a0b7e9a4"),
    st_id: 1,
    Name: 'Mansi',
    Address: 'Pune',
    Branch: 'It'
  },
  {
    _id: ObjectId("63261f0811ecd899a0b7e9a5"),
    st_id: 2,
    Name: 'Ankita',
    Address: 'Mumbai',
    Branch: 'It'
  },
  {
    _id: ObjectId("63261f4811ecd899a0b7e9a7"),
    st_id: 4,
    Name: 'Sneha',
    Address: 'Nashik',
    Branch: 'CS',
    upsert: true
  },
]
```

```
{
  _id: ObjectId("63261f7611ecd899a0b7e9a8"),
  st_id: 5,
  Name: 'Khushi',
  Address: 'Pune',
  Branch: 'E&Tc'
}
]
```

Count:

```
mansi> db.ITstudent.count();
```

DeprecationWarning: Collection.count() is deprecated. Use countDocuments or estimatedDocumentCount.

```
7
```

Replace:

```
mansi>
db.ITstudent.replaceOne({Name:"Ankita"},{Name:"Ankita",increment:[{st_id:2,Branch:"IT"},{st_id:9,Branch:"CS"}]});
```

```
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

```
mansi> db.ITstudent.find().pretty();
```

```
[
  {
    _id: ObjectId("63261ed311ecd899a0b7e9a4"),
    st_id: 1,
    Name: 'Mansi',
    Address: 'Pune',
    Branch: 'It'
```

```
},
{
  _id: ObjectId("63261f0811ecd899a0b7e9a5"),
  Name: 'Ankita',
  increment: [ { st_id: 2, Branch: 'IT' }, { st_id: 9, Branch: 'CS' } ]
},
{
  _id: ObjectId("63261f4811ecd899a0b7e9a7"),
  st_id: 4,
  Name: 'Sneha',
  Address: 'Nashik',
  Branch: 'CS',
  upsert: true
},
{
  _id: ObjectId("63261f7611ecd899a0b7e9a8"),
  st_id: 5,
  Name: 'Khushi',
  Address: 'Pune',
  Branch: 'E&Tc'
},
{
  _id: ObjectId("63261f9411ecd899a0b7e9a9"),
  st_id: 6,
  Name: 'Niraj',
  Address: 'Delhi',
  Branch: 'E&Tc'
},
{
  _id: ObjectId("63261fc911ecd899a0b7e9aa"),
  st_id: 7,
```

```

    Name: 'Amit',
    Address: 'Kalyan',
    Branch: 'IT'
  },
  {
    _id: ObjectId("63261ff311ecd899a0b7e9ab"),
    st_id: 8,
    Name: 'Asavari',
    Address: 'Latur',
    Branch: 'CS'
  }
]

```

Find And Modify:

```
mansi> db.ITstudent.findAndModify({query:{name:"Mansi"},update:{$set:{st_id:10}},upsert:true});
```

```
null
```

```
mansi> db.ITstudent.findAndModify({query:{name:"Mansi"},update:{$set:{st_id:1}},upsert:true});
```

```
{ _id: ObjectId("632629500f44e5b5e4b2ae71"), name: 'Mansi', st_id: 10 }
```

```
mansi> db.Itstudent.find().pretty();
```

```
mansi> db.ITstudent.find().pretty();
```

```

[
  {
    _id: ObjectId("63261ed311ecd899a0b7e9a4"),
    st_id: 1,
    Name: 'Mansi',
    Address: 'Pune',
    Branch: 'It'
  },
  {
    _id: ObjectId("63261f0811ecd899a0b7e9a5"),
    Name: 'Ankita',

```

```
increment: [ { st_id: 2, Branch: 'IT' }, { st_id: 9, Branch: 'CS' } ]
},
{
  _id: ObjectId("63261f4811ecd899a0b7e9a7"),
  st_id: 4,
  Name: 'Sneha',
  Address: 'Nashik',
  Branch: 'CS',
  upsert: true
},
{
  _id: ObjectId("63261f7611ecd899a0b7e9a8"),
  st_id: 5,
  Name: 'Khushi',
  Address: 'Pune',
  Branch: 'E&Tc'
},
{
  _id: ObjectId("63261f9411ecd899a0b7e9a9"),
  st_id: 6,
  Name: 'Niraj',
  Address: 'Delhi',
  Branch: 'E&Tc'
},
{
  _id: ObjectId("63261fc911ecd899a0b7e9aa"),
  st_id: 7,
  Name: 'Amit',
  Address: 'Kalyan',
  Branch: 'IT'
},
```

```
{
  _id: ObjectId("63261ff311ecd899a0b7e9ab"),
  st_id: 8,
  Name: 'Asavari',
  Address: 'Latur',
  Branch: 'CS'
},
{
  _id: ObjectId("632629500f44e5b5e4b2ae71"),
  name: 'Mansi',
  st_id: 1
}
]
```

Drop:

```
mansi> db.ITstudent.drop();
```

```
true
```

```
mansi> db.ITstudent.find();
```


