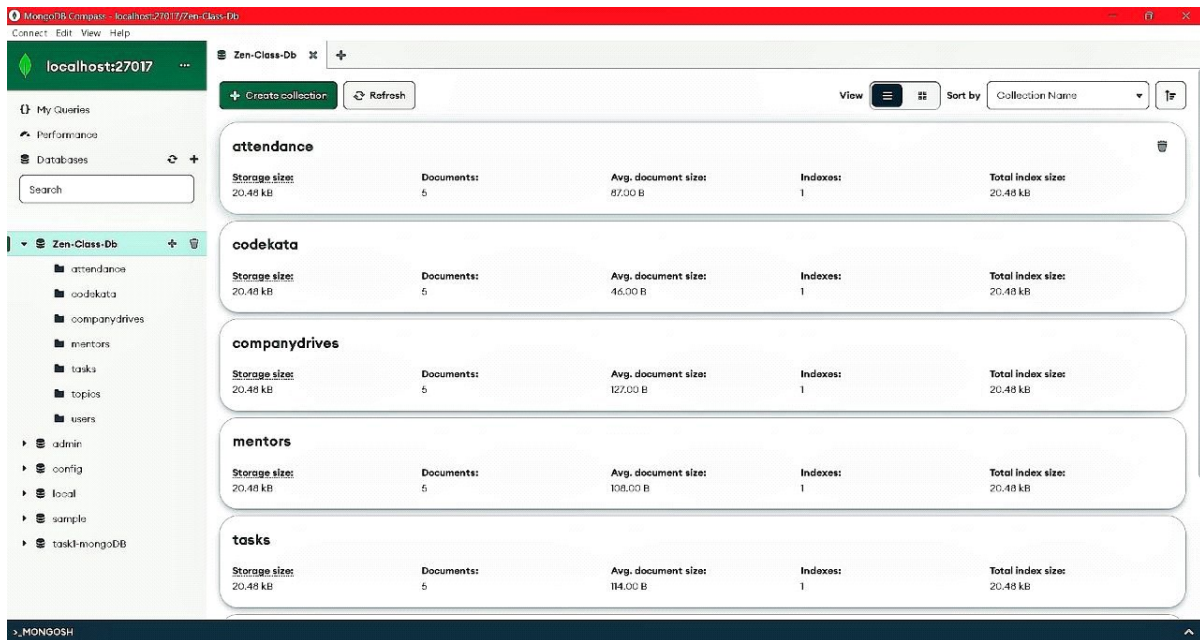# MongoDB Task Day-2

Design database for Zen class programme=>

Queries:

- **Find all the topics and tasks which are thought in the month of October?**

  Submitted :

```
    db.topics.aggregate([
  {
    $lookup: {
      from: "tasks",
      localField: "taskid",
      foreignField: "taskid",
      as: "details"
    }
  },
  {
    $match: {
      $and: [
        { topic_date: { $gte: new Date("2020-10-01"), $lte: new Date("2020-10-31") } },
```

```
                    {
                       $or: [
                          { "details.due_date": { $gte: new Date("2020-10-01"), $lte: new Date("2020-10-
    31") } },
                          { "details.due_date": { $exists: false } }
                       ]
                    }
                 ]
              }
           },
           {
              $project: {
                 _id: 0,
                 topic_date: 1,
                 topic: 1,
                 task: "$details.task"
              }
           }
        ])
```

```
< {
  topic: 'JavaScript',
  topic_date: 2020-10-16T00:00:00.000Z,
  task: [
    'JavaScript Task'
  ]
}
{
  topic: 'HTML',
  topic_date: 2020-10-23T00:00:00.000Z,
  task: [
    'HTML Task'
  ]
}
```

- **Find all the company drives which appeared between 15 oct-2020 and 31-oct-2020?**

Submitted :

```
db.companydrives.find({$and:[{drive_date:{$gte:new          Date("2020-10-15")}},
{drive_date:{$lte:new Date("2020-10-31")}}]},
{_id:0,drive_id:1,company:1,drive_date:1}).toArray()
```

```
> db.companydrives.find({[$and:[[drive_date:[$gte:new Date("2020-10-15")]]},
  [drive_date:[$lte:new Date("2020-10-31")]]]},[_id:0,drive_id:1,company:1,drive_date:1]).toArray()
< [
    {
      drive_id: 1,
      drive_date: 2020-10-19T00:00:00.000Z,
      company: 'Infosys'
    },
    {
      drive_id: 2,
      drive_date: 2020-10-27T00:00:00.000Z,
      company: 'Amazon'
    }
  ]
```

- **Find all the company drives and students who are appeared for the placement?**

  Submitted :

  db.companydrives.find({},{_id:0}).toArray()

```
    drive_id: 1,
    attendees: [ 'Max', 'Ali', 'Steve' ],
    drive_date: 2020-10-19T00:00:00.000Z,
    company: 'Infosys'
  },
  {
    drive_id: 2,
    attendees: [ 'Harry', 'Max', 'John' ],
    drive_date: 2020-10-27T00:00:00.000Z,
    company: 'Amazon'
  },
  {
    drive_id: 3,
    attendees: [ 'Ali', 'Harry', 'Steve', 'John' ],
    drive_date: 2020-11-08T00:00:00.000Z,
    company: 'HCL'
  },
  {
    drive_id: 4,
    attendees: [ 'Harry', 'Steve' ],
    drive_date: 2020-11-17T00:00:00.000Z,
    company: 'TCS'
  },
  {
    drive_id: 5,
    attendees: [ 'Max', 'John', 'Steve' ],
    drive_date: 2020-11-25T00:00:00.000Z,
```

- **Find the number of problems solved by the user in codekata?**

  Submitted :

  db.codekata.find({},{_id:0}).toArray()

```
> db.codekata.find({},{_id:0}).toArray()
< [
    { userid: 1, solved: 55 },
    { userid: 2, solved: 100 },
    { userid: 3, solved: 90 },
    { userid: 4, solved: 70 },
    { userid: 5, solved: 67 }
  ]
```

- **Find all the mentors with who has the mentee's count more than 15?**

  Submitted :

  db.mentors.find({mentee_count:{$gt:15}},{_id:0}).toArray()

```
> db.mentors.find({mentee_count:[$gt:15}},[_id:0}).toArray()
< [
    {
      mentorid: 2,
      mentorname: 'Rashid',
      mentor_email: 'rashid@gmail.com',
      mentee_count: 27
    },
    {
      mentorid: 3,
      mentorname: 'Ben',
      mentor_email: 'ben@gmail.com',
      mentee_count: 22
    },
    {
      mentorid: 4,
      mentorname: 'Farook',
      mentor_email: 'farook@gmail.com',
      mentee_count: 19
    }
  ]
```

- **Find the number of users who are absent and task is not submitted between 15 oct-2020 and 31-oct-2020?**

  Submitted :

  db.users.countDocuments({$and: [{ absence: true, },
  {
  task_pending: true,
  },
  {
  date: {$gte: new Date("2020-10-15"),$lte: new Date("2020-10-31"), },},
  ],
  })

```
> db.users.countDocuments({
    $and: [
      {
        absence: true,
      },
      {
        task_pending: true,
      },
      {
        date: [
          $gte: new Date("2020-10-15"),
          $lte: new Date("2020-10-31"),
        },
      },
    ],
  })
< 1
```