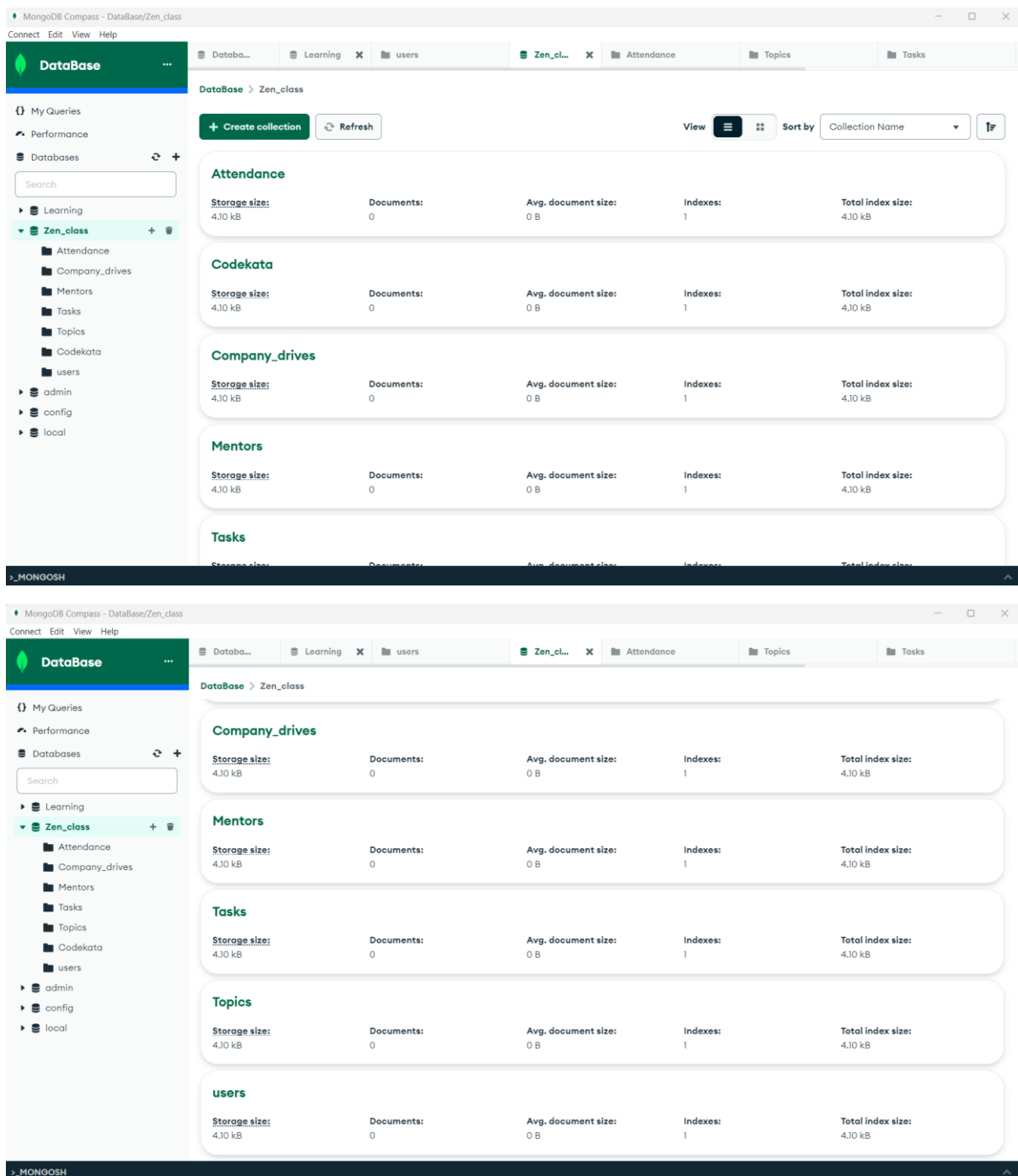


# Mongo DB Taks-2

## CREATED DATABASE



1. Find all the topics and tasks which are thought in the month of October

Answer:

```
db.topics.aggregate([  
  {  
    $lookup: {
```

## Mongo DB Taks-2

```
    from: "tasks",
    localField: "topicid",
    foreignField: "topicid",
    as: "taskinfo"
  }
},
{
  $match: {
    $and: [
      { topic_date: { $gte: new Date("2020-10-01"), $lt: new Date("2020-11-01") }
    },
    {
      $or: [
        { "taskinfo.due_date": { $gte: new Date("2020-10-01"), $lt: new
Date("2020-11-01") } },
        { "taskinfo.due_date": { $exists: false } }
      ]
    }
  ]
}
},
{
  $project: {
    _id: 0,
    topicid: 1,
    topic: 1,
    topic_date: 1,
    tasks: "$taskinfo.task",
    due_dates: "$taskinfo.due_date"
  }
}
```

## Mongo DB Taks-2

1)

```
>_MONGOSH
{
  "topicid": 1,
  "topic": "HTML",
  "topic_date": "2020-10-17T18:30:00.000Z",
  "tasks": [
    "HTML Task"
  ],
  "due_dates": [
    "2020-10-17T18:30:00.000Z"
  ]
}
[
  {
    "topicid": 2,
    "topic": "CSS",
    "topic_date": "2020-10-27T18:30:00.000Z",
    "tasks": [
      "CSS Task"
    ],
    "due_dates": [
      "2020-10-27T18:30:00.000Z"
    ]
  }
]
Zen_class>
```

2. Find all the company drives which appeared between 15 oct-2020 and 31-oct-2020

Answer:

```
db.companydrives.find({
  $or: [
    { drive_date: { $gte: new Date("15-oct-2020") } },
    { drive_date: { $lte: new Date("31-oct-2020") } }
  ]
})
```

```
>_MONGOSH
{
  "_id": ObjectId("669ec003e4adb79ec6556d86"),
  "userid": 1,
  "drive_date": "2020-10-19T18:30:00.000Z",
  "company": "Apple"
}
[
  {
    "_id": ObjectId("669ec003e4adb79ec6556d87"),
    "userid": 1,
    "drive_date": "2020-10-21T18:30:00.000Z",
    "company": "Amazon"
  },
  {
    "_id": ObjectId("669ec003e4adb79ec6556d88"),
    "userid": 2,
    "drive_date": "2020-10-24T18:30:00.000Z",
    "company": "TCS"
  },
  {
    "_id": ObjectId("669ec003e4adb79ec6556d89"),
    "userid": 3,
    "drive_date": "2020-10-29T18:30:00.000Z",
    "company": "Flipkart"
  },
  {
    "_id": ObjectId("669ec003e4adb79ec6556d8a"),
    "userid": 4,
    "drive_date": "2020-11-04T18:30:00.000Z",
    "company": "Amazon"
  }
]
```

3. Find all the company drives and students who are appeared for the placement.

Answer:

## Mongo DB Taks-2

```
db.companydrives.aggregate([
  {
    $lookup: {
      from: "users",
      localField: "userid",
      foreignField: "userid",
      as: "userinfo"
    }
  },
  {
    $project: {
      _id: 0,
      company: 1,
      drive_date: 1,
      students: "$userinfo"
    }
  }
])
```



```
>_MONGOOSH
{
  "drive_date": "2020-10-19T18:30:00.000Z",
  "company": "Apple",
  "students": [
    {
      "_id": "ObjectId('669ebf87e4adb79ec6556d6d')",
      "userid": 1,
      "name": "Harikaran",
      "email": "hari@gmail.com"
    }
  ]
}
{
  "drive_date": "2020-10-21T18:30:00.000Z",
  "company": "Amazon",
  "students": [
    {
      "_id": "ObjectId('669ebf87e4adb79ec6556d6d')",
      "userid": 1,
      "name": "Harikaran",
      "email": "hari@gmail.com"
    }
  ]
}
{
  "drive_date": "2020-10-24T18:30:00.000Z",
  "company": "TCS",
  "students": [
    {
      "_id": "ObjectId('669ebf87e4adb79ec6556d6d')",
      "userid": 1,
      "name": "Harikaran",
      "email": "hari@gmail.com"
    }
  ]
}
```

#### 4. Find the number of problems solved by the user in codekata

Answer:

```
db.codekata.aggregate([
  {
```

## Mongo DB Taks-2

```
$lookup: {  
  from: "users",  
  localField: "userid",  
  foreignField: "userid",  
  as: "userinfo"  
}  
,  
{  
  $group: {  
    _id: {  
      userid: "$userid",  
      username: "$userinfo.name"  
    },  
    total_problems_solved: { $sum: "$problems" }  
  }  
},  
{  
  $project: {  
    _id: 0,  
    userid: "$_id.userid",  
    username: "$_id.username",  
    total_problems_solved: 1  
  }  
}  
])
```

## Mongo DB Taks-2

```
>_MONGOOSH
{
  total_problems_solved: 50,
  userid: 1,
  username: [
    'Harikaran'
  ]
}
{
  total_problems_solved: 90,
  userid: 3,
  username: [
    'karthika'
  ]
}
{
  total_problems_solved: 60,
  userid: 2,
  username: [
    'priya'
  ]
}
{
  total_problems_solved: 51,
  userid: 4,
  username: [
    'livin'
  ]
}
```

5. Find all the mentors with who has the mentee's count more than 15

Answer:

```
db.users.aggregate([
  {
    $match: { mentorid: { $exists: true } }
  },
  {
    $group: {
      _id: "$mentorid",
      mentorname: { $first: "$mentorname" },
      mentee_count: { $sum: 1 }
    }
  },
  {
    $match: { mentee_count: { $gt: 15 } }
  },
  {
    $project: {
      _id: 0,
      mentorid: "$_id",
      mentorname: 1,
      mentee_count: 1
    }
  }
])
```

## Mongo DB Taks-2

```
}  
}  
])
```

```
>_MONGOOSH
> db.users.aggregate([
  {
    $match: { mentorid: { $exists: true } }
  },
  {
    $group: {
      _id: "$mentorid",
      mentorname: { $first: "$mentorname" },
      mentee_count: { $sum: 1 }
    }
  },
  {
    $match: { mentee_count: { $gt: 15 } }
  },
  {
    $project: {
      _id: 0,
      mentorid: "$_id",
      mentorname: 1,
      mentee_count: 1
    }
  }
])
<
Zen_class>
```

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

Answer:

```
db.attendance.aggregate([
  {
    $lookup: {
      from: "topics",
      localField: "topicid",
      foreignField: "topicid",
      as: "topics"
    }
  },
  {
    $lookup: {
      from: "tasks",
```

## Mongo DB Taks-2

```
      localField: "topicid",
      foreignField: "topicid",
      as: "tasks"
    }
  },
  {
    $match: {
      attended: false,
      "tasks.submitted": false,
      $and: [
        { "topics.topic_date": { $gte: new Date("15-oct-2020") } },
        { "topics.topic_date": { $lte: new Date("31-oct-2020") } },
        { "tasks.due_date": { $gte: new Date("15-oct-2020") } },
        { "tasks.due_date": { $lte: new Date("31-oct-2020") } }
      ]
    }
  },
  {
    $count: "No_of_students_absent"
  })
```



## Mongo DB Taks-2

```
>_MONGOOSH
Zen_class> db.attendance.aggregate([
  {
    $lookup: {
      from: "topics",
      localField: "topicid",
      foreignField: "topicid",
      as: "topics"
    }
  },
  {
    $lookup: {
      from: "tasks",
      localField: "topicid",
      foreignField: "topicid",
      as: "tasks"
    }
  },
  {
    $match: {
      attended: false,
      "tasks.submitted": false,
      $and: [
        { "topics.topic_date": { $gte: new Date("15-oct-2020") } },
        { "topics.topic_date": { $lte: new Date("31-oct-2020") } },
        { "tasks.due_date": { $gte: new Date("15-oct-2020") } },
        { "tasks.due_date": { $lte: new Date("31-oct-2020") } }
      ]
    }
  }
])
```