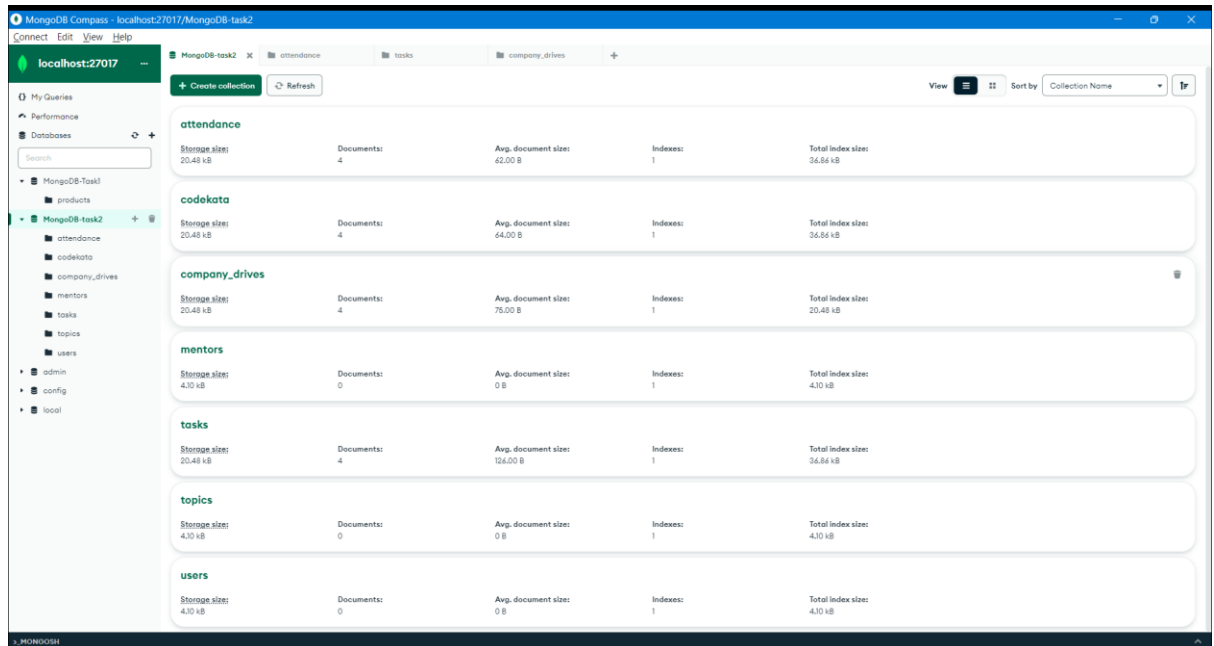


# MongoDB-Task-2



Collection	Storage size	Documents	Avg. document size	Indexes	Total index size
attendance	20.48 kB	4	62.00 B	1	36.84 kB
codekata	20.48 kB	4	64.00 B	1	36.84 kB
company_drives	20.48 kB	4	75.00 B	1	20.48 kB
mentors	4.10 kB	0	0 B	1	4.10 kB
tasks	20.48 kB	4	126.00 B	1	36.84 kB
topics	4.10 kB	0	0 B	1	4.10 kB
users	4.10 kB	0	0 B	1	4.10 kB

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

```
> db.topics.aggregate([
  {
    $lookup: {
      from: "tasks",
      localField: "topic_id",
      foreignField: "topic_id",
      as: "taskinfo"
    }
  },
  {
    $match:{$and:[{$or:[{topic_date:{>:new Date("2023-9-30")},{topic_date:{<:new Date("2023-11-1")}}]},
    {$or:[{"taskinfo.submission_date":{>:new Date("2023-9-30")},{taskinfo.submission_date":{<:new Date("2023-11-1")}}]}
  ]}
}]
])
```

```

< {
  _id: ObjectId('65e2c100a23270ff3f766013'),
  topic_id: 1,
  topic: 'HTML',
  topic_date: 2023-10-02T18:30:00.000Z,
  taskinfo: [
    {
      _id: ObjectId('65e2c6c8a23270ff3f766022'),
      task_id: 1,
      topic_id: 1,
      task: 'create HTML form',
      submitted: true,
      submission_date: 2023-10-04T18:30:00.000Z
    }
  ]
}
{
  _id: ObjectId('65e2c100a23270ff3f766014'),
  topic_id: 2,
  topic: 'CSS',
  topic_date: 2023-10-11T18:30:00.000Z,
  taskinfo: [
    {
      _id: ObjectId('65e2c6c8a23270ff3f766023'),
      task_id: 2,
      topic_id: 2,
      task: 'create form and make css',
      submitted: true,
      submission_date: 2023-10-14T18:30:00.000Z
    }
  ]
}
}

```

Totally, **4 Documents** with id ,topic-id task-id task, submission status and submition\_date.

---

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

```

> db.company_drives.find({$or:[{drive_date:{$gte:new Date('15-oct-2023')}}},{drive_date:new Date('31-oct-2023')}}})

```

```
< {
  _id: ObjectId('65e2de61a23270ff3f766036'),
  user_id: 2,
  drive_date: 2023-10-17T18:30:00.000Z,
  company: 'Infosys'
}
{
  _id: ObjectId('65e2de90a23270ff3f766037'),
  user_id: 3,
  drive_date: 2023-11-01T18:30:00.000Z,
  company: 'Amazon'
}
{
  _id: ObjectId('65e2de90a23270ff3f766038'),
  user_id: 4,
  drive_date: 2023-11-09T18:30:00.000Z,
  company: 'Pegatron'
}
```

---

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

```
> db.company_drives.aggregate([
  {
    $lookup: {
      from: 'users',
      localField: 'user_id',
      foreignField: 'user_id',
      as: 'userinfo'
    }
  },
  {$project: {_id: 0, 'userinfo.user_id': 1, 'userinfo.user_name': 1, company: 1, 'userinfo.email': 1}}
])
```

```
< {  
  company: 'TCS',  
  userinfo: [  
    {  
      user_id: 1,  
      user_name: 'Arun',  
      email: 'arunpandian@gmail.com'  
    }  
  ]  
}  
{  
  company: 'Infosys',  
  userinfo: [  
    {  
      user_id: 2,  
      user_name: 'Ajay',  
      email: 'ajay@gmail.com'  
    }  
  ]  
}  
{  
  company: 'Amazon',  
  userinfo: [  
    {  
      user_id: 3,  
      user_name: 'preethi',  
      email: 'preethi@gmail.com'  
    }  
  ]  
}
```

Totally, **4 Documents** projected with company placed detail and student details.

---

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

```
> db.codekata.aggregate([
  {
    $lookup:{
      from:"users",
      localField:"user_id",
      foreignField:"user_id",
      as:"userinfo"
    }
  },
  {
    $project:{
      _id:0,
      solved_problems:1
    }
  }
])
```

```
< {
  solved_problems: 500
}
{
  solved_problems: 450
}
{
  solved_problems: 325
}
{
  solved_problems: 456
}
```

Projected Number of problems solved by users.

---

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

```
> db.mentors.find({mentee_count:{$gt:15}});
```

```
< {
  _id: ObjectId('65e2c9c7a23270ff3f766028'),
  mentor_id: 1,
  mentor_name: 'Mr.suresh',
  mentor_email: 'suresh@gmail.com',
  mentee_count: 100
}
{
  _id: ObjectId('65e2c9c7a23270ff3f766029'),
  mentor_id: 2,
  mentor_name: 'Mr.pugazh',
  mentor_email: 'pugazh@gmail.com',
  mentee_count: 80
}
{
  _id: ObjectId('65e2ca59a23270ff3f76602b'),
  mentor_id: 4,
  mentor_name: 'Mr.Mallikarjun',
  mentor_email: 'malligarjun@gmail.com',
  mentee_count: 20
}
```

---

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

```
> db.attendance.aggregate([
  {$lookup:
    {from:'topics',
     localField:'topic_id',
     foreignField:'topic_id',
     as:'topics'}
  },
  {$lookup:
    {from:'tasks',
     localField:'topic_id',
     foreignField:'topic_id',
     as:'tasks'}
  },
  {$match:
    {$and:[{attendance:false},{tasks.submitted:false}]}
  },
  {$match:
    {$and:[{$or:[{'topics.topic_date':{$gte:new Date('15-oct-2023')}},{'topics.topic_date':{$lte:new Date('31-oct-2023')}}]}
  },
  {$or:[{'tasks.submission_date':{$gte:new Date('15-oct-2023')}},{'task.submission_date':{$lte:new Date('31-oct-2023')}}]}
  ]},
  {$count:'No_of_students_absent'}
]).pretty()
```

```
< {
  No_of_students_absent: 1
}
```