

## CASE STUDY 2

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

```
> db.topics.find({
  $or: [
    {
      start_date: {
        $gte: ISODate("2023-10-01T00:00:00.000Z"),
        $lte: ISODate("2023-10-31T23:59:59.999Z")
      }
    },
    {
      end_date: {
        $gte: ISODate("2023-10-01T00:00:00.000Z"),
        $lte: ISODate("2023-10-31T23:59:59.999Z")
      }
    }
  ]
}, {
  _id: 0,
  topic: 1,
  start_date: 1,
  end_date: 1
})
< {
  topic: 'HTML',
  start_date: 2023-10-07T00:00:00.000Z,
  end_date: 2023-10-08T00:00:00.000Z
}

{
  topic: 'CSS',
  start_date: 2023-10-14T00:00:00.000Z,
  end_date: 2023-10-15T00:00:00.000Z
}
{
  topic: 'Javascript',
  start_date: 2023-10-21T00:00:00.000Z,
  end_date: 2023-10-22T00:00:00.000Z
}
{
  topic: 'React',
  start_date: 2023-10-28T00:00:00.000Z,
  end_date: 2023-10-29T00:00:00.000Z
}
casestudy2 > |
```

2. Find all the company drives which appeared between 15 oct-2023 and 31-oct-2023

```
> db.companydrives.find({
  drive_date: {
    $gte: ISODate("2023-10-15"),
    $lte: ISODate("2023-10-31")
  }
})
< {
  _id: ObjectId('6880ebba3e243ba176286eef'),
  userid: 1,
  drive_date: 2023-10-16T00:00:00.000Z,
  company: 'TCS'
}
{
  _id: ObjectId('6880ebba3e243ba176286ef0'),
  userid: 1,
  drive_date: 2023-10-19T00:00:00.000Z,
  company: 'HCL'
}

{
  _id: ObjectId('6880ebba3e243ba176286ef1'),
  userid: 2,
  drive_date: 2023-10-22T00:00:00.000Z,
  company: 'Amazon'
}
{
  _id: ObjectId('6880ebba3e243ba176286ef2'),
  userid: 3,
  drive_date: 2023-10-28T00:00:00.000Z,
  company: 'Wipro'
}
casestudy2 >
```

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

```
> db.codekata.aggregate([
  {
    $group: {
      _id: "$user_id",
      total_codekata_problems_solved: { $sum: "$codekata_solved" }
    }
  }
])
< {
  _id: 3,
  total_codekata_problems_solved: 200
}
{
  _id: 1,
  total_codekata_problems_solved: 300
}
{
  _id: 2,
  total_codekata_problems_solved: 250
}
{
  _id: 4,
  total_codekata_problems_solved: 190
}
{
  _id: 5,
  total_codekata_problems_solved: 180
}
casesstudy2>
```

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

```
> db.mentors.find({
  mentees: { $gt: 15 }
})
< {
  _id: ObjectId('6880ebd43e243ba176286ef4'),
  mentor_id: 1,
  mentor_name: 'Sathish',
  mentees: 30
}
{
  _id: ObjectId('6880ebd43e243ba176286ef6'),
  mentor_id: 3,
  mentor_name: 'Thillan',
  mentees: 50
}
{
  _id: ObjectId('6880ebd43e243ba176286ef7'),
  mentor_id: 4,
  mentor_name: 'Kulunthan',
  mentees: 70
}
```

```
{
  _id: ObjectId('6880ebd43e243ba176286ef8'),
  mentor_id: 5,
  mentor_name: 'Mani',
  mentees: 16
}
{
  _id: ObjectId('6880ebd43e243ba176286efb'),
  mentor_id: 8,
  mentor_name: 'Parthiban',
  mentees: 32
}
{
  _id: ObjectId('6880ebd43e243ba176286efd'),
  mentor_id: 10,
  mentor_name: 'Vijay',
  mentees: 35
}
casestudy2>
```