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

```
db.getCollection('Topics').aggregate(
  [
    {
      $lookup: {
        from: 'tasks',
        localField: 'topic',
        foreignField: 'task',
        as: 'topicdata'
      }
    },
    {
      $match: { topicDate: { $regex: '2020-10' } }
    },
    {
      $project: {
        _id: 0,
        topic: 1,
        topicDate: 1,
        'topic data.userId': 1,
        'topic data.submitted': 1,
        'topic data.task': 1
      }
    }
  ],
);
```

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

```
db.getCollection('companydrives').find({
  driveDate: {
    $gte: '2020-10-01',
    $lte: '2020-10-31'
  }
});
```

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

```
db.getCollection('companydrives').aggregate(
  [
    {
      $lookup: {
        from: 'users',
        localField: 'userId',
        foreignField: 'userId',
        as: 'studentInfo'
      }
    },
    {
      $project: {
        _id: 0,
        'studentInfo.userName': 1,
        company: 1,
        driveDate: 1,
        'studentInfo.userEmail': 1,
        'studentInfo.userId': 1
      }
    }
  ],

);
```

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

```
db.getCollection('codekata').aggregate(
 [
   {
     $lookup: {
       from: 'users',
       localField: 'userId',
       foreignField: 'userId',
       as: 'userDetails'
     }
   },
   { $unwind: '$userDetails' },
   {
     $group: {
       _id: {
         userId: '$userId',
         userName: '$userDetails.userName'
       },
       problems_solved: { $sum: 1 }
     }
   },
   {
     $project: {
       _id: 0,
       problems_solved: 1,
       userId: '$_id.userId',
       userName: '$_id.userName'
     }
   }
 ],
);
```

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

```
db.getCollection('mentors').find({ menteeCount: { $gt: 15 }})
```

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

```
db.getCollection('attendance').aggregate(
 [
   {
     $lookup: {
       from: 'topics',
       localField: 'topicId',
       foreignField: 'topicId',
       as: 'absent'
     } },
   {
     $lookup: {
       from: 'tasks',
       localField: 'userId',
       foreignField: 'userId',
       as: 'task-notSubmitted'
     }
   },
   { $unwind: '$task-notSubmitted' },
   { $unwind: '$absent' },
   {
     $match: {
       attended: false,
       'absent.topicDate': {
         $gte: '2020-10-15',
         $lte: '2020-10-31'
       }
     }
   },
   {
     $match: {
       'task-notSubmitted.dueDate': {
         $gte: '2020-10-15',
         $lte: '2020-10-31'
       },
       'task-notSubmitted.submitted': false
     }
   },
   { $project: { _id: 0, 'absent._id': 0 } },
   { $project: { 'task-notSubmitted._id': 0 } }
 ],
);
```