MongoDB Task

Design database for Zen class programme

users
codekata
attendance
topics
tasks
company_drives
mentors

users :

```
zen_class> db.users.insertMany([
{name: "swe",email: "swe@gmail.com"},
{name: "priya",email: "priya@gmail.com"},
{name: "nive",email: "nive@gmail.com"}])
```

codekata

```
zen_class> db.codekata.insertMany([
{ user_id: "1", problem_name: "javascript", solved: "true", date_solved:
ISODate("2020-10-05") },
{ user_id: "2", problem_name: "react", solved: “false”, date_solved:null },
{ user_id: "3", problem_name: "html", solved: "true", date_solved:
ISODate("2020-10-25") },
{ user_id: "4", problem_name: "array", solved: "true", date_solved:
ISODate("2020-10-15") }])
```

attendance

```
zen_class> db.attendance.insertMany([
{ user_id: "1", date: ISODate("2020-10-10"), status: "present" },
{ user_id: "2", date: ISODate("2020-10-10"), status: "absent" },
{ user_id: "3", date: ISODate("2020-10-10"), status: "present" },
{ user_id: "4", date: ISODate("2020-10-10"), status: "present" }])
```

topics

```
db.topics.insertMany([
{ topic_name: "Introduction to javascript", date: ISODate("2020-10-15") },
```

{ topic_name: "Introduction to MongoDB", date: ISODate("2020-10-20") },
{ topic_name: "Introduction to nodejs", date: ISODate("2020-10-25") },
{ topic_name: "jwt", date: ISODate("2020-10-27") }
])

tasks

```
db.tasks.insertMany([
{ user_id: "1", task_description: "Complete MongoDB query exercise",
date_assigned:ISODate("2020-10-20"), date_submitted: ISODate("2020-10-25") },
{ user_id: "2",task_description: "Design react aplication", date_assigned:
ISODate("2020-10-22"), date_submitted: null },
{ user_id: "3", task_description: "Complete sql task",
date_assigned:ISODate("2020-10-20"), date_submitted: ISODate("2020-10-27")
}])
```

company_drives

```
db.company_drives.insertMany([
{ company_name: "paypal", start_date: ISODate("2020-10-20"), end_date:
ISODate("2020-10-25"), students_attended: 4 },
{ company_name: "zoho",start_date: ISODate("2020-10-28"), end_date:
ISODate("2020-10-31"),students_attended: 3 }])
```

mentors

```
db.mentors.insertMany([
{ mentor_name: "poonam", mentees: "FSDWD56" },
{ mentor_name: "shivam", mentees: "FSDWE54" }])
```

1. Find all the topics and tasks which are thought in the month of October
   Topics:
   ```
   zen_class> db.topics.find(
   { date: { $gte: ISODate("2020-10-01"), $lte: ISODate("2020-10-31") }
   })
   ```
   Tasks:
   ```
   zen_class> db.tasks.find({ date_assigned: { $gte: ISODate("2020-10-01"),
   $lte: ISODate("2020-10-31") } })
   ```

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

```
zen_class> db.company_drives.find(
{
start_date: { $gte: ISODate("2020-10-15"), $lte: ISODate("2020-10-31") }
})
```

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

```
zen_class> db.company_drives.aggregate([
{ $lookup: { from: "users", localField: "students_attended", foreignField: "_id",
as: "students" }
}])
```

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

```
zen_class> db.codekata.find({ solved: "true" })
```

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

```
zen_class> db.mentors.find({mentees:{ $gt: 15 }},{mentor_name:1})
```

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

```
zen_class> db.attendance.find(
{date: {$gte: ISODate("2020-10-15"), $lte: ISODate("2020-10-31")},
status: "absent",user_id: {$nin: db.tasks.distinct("user_id", {date_submitted:
{$gte: ISODate("2020-10-15"),$lte: ISODate("2020-10-31")}}) }
}).count()
```