# Mongodb task-02

**Schema for the Database**

1. **Users**: Store information about users participating in the program.
   * Attributes: user\_id, name, email, role, etc.
2. **CodeKata**: Store information about problems and solutions solved by users.
   * Attributes: user\_id, problem\_id, date\_solved, etc.
3. **Attendance**: Store attendance records of users in classes.
   * Attributes: user\_id, class\_id, date\_attended, status (attended, absent), etc.
4. **Topics**: Store information about topics covered in the classes.
   * Attributes: topic\_id, topic\_name, date\_covered, etc.
5. **Tasks**: Store information about tasks assigned to users.
   * Attributes: task\_id, user\_id, task\_description, date\_assigned, date\_submitted, etc.
6. **CompanyDrives**: Store information about company drives for placements.
   * Attributes: drive\_id, company\_name, date\_conducted, etc.
7. **Mentors**: Store information about mentors guiding users.
   * Attributes: mentor\_id, mentor\_name, mentee\_count, etc.

**Tasks Mentioned**

Find all the topics and tasks which are taught in the month of October:

db.topics.find({ "date\_covered": { $gte: ISODate("2020-10-01"), $lte: ISODate("2020-10-31") }})

Find all the company drives which appeared between 15 Oct 2020 and 31 Oct 2020:

db.company\_drives.find({ "date\_conducted": { $gte: ISODate("2020-10-15"), $lte: ISODate("2020-10-31") }})

Find all the company drives and students who appeared for the placement:

db.company\_drives.aggregate([

{

$lookup:

{

from: "attendance",

localField: "drive\_id",

foreignField: "class\_id",

as: "attendance\_info"

}

}

])

Find the number of problems solved by the user in CodeKata:  
db.codekata.aggregate([

{

$group:

{

\_id: "$user\_id",

total\_problems\_solved: { $sum: 1 }

}

}

])  
Find all the mentors with mentee's count more than 15:

db.mentors.find({ "mentee\_count": { $gt: 15 }})

Find the number of users who were absent and task was not submitted between 15 Oct 2020 and 31 Oct 2020:

db.attendance.find({ "date\_attended": { $gte: ISODate("2020-10-15"), $lte: ISODate("2020-10-31") }, "status": "absent" }).count()