MongoDB Database Design for Zen Class Programme

Queries

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

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

db.tasks.find({ "date": { $gte: "2020-10-01", $lte: "2020-10-31" } });

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

db.company_drives.find({ "date": { $gte: "2020-10-15", $lte: "2020-10-31" } });

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

```
db.company_drives.aggregate([

  {

    $lookup: {

      from: "users",

      localField: "drive_id",

      foreignField: "user_id",

      as: "students"

    }

  }

]);
```

4. Find the number of problems solved by each user in CodeKata

db.codekata.find({}, { "user_id": 1, "problems_solved": 1 });

5. Find all the mentors with mentees count more than 15

db.mentors.find({ "mentees_count": { $gt: 15 } });

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

```
db.attendance.aggregate([
  {
    $match: {
      "date": { $gte: "2020-10-15", $lte: "2020-10-31" },
      "status": "Absent"
    }
  },
  {
    $lookup: {
      from: "tasks",
      localField: "user_id",
      foreignField: "task_id",
      as: "tasks"
    }
  },
  {
    $unwind: "$tasks"
  },
  {
```

```
    $match: {

      "tasks.date": { $gte: "2020-10-15", $lte: "2020-10-31" }

    }

  },

  {

    $group: {

      _id: "$user_id",

      "absent_count": { $sum: 1 }

    }

  }

]);
```