

ASSIGNMENT - 04

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

Ans 1.

```
> db.topics.aggregate([
...   {$project: {name: 1, month: {$month: '$date'}}},
...   {$match: {month: 10}}
... ]).pretty()

{
  "_id" : ObjectId("821a7b8f2738e5415c7fe2fc"),
  "month" : 10
}
{
  "_id" : ObjectId("821a7b8f2738e5415c7fe305"),
  "month" : 10
}
```

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

Ans 2.

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

{
  "_id" : ObjectId("821a7d052738e5415c7fe302"),
  "company_id" : 2,
  "company_name" : "Adobe",
  "user_id" : 4,
  "date" : ISODate("2020-10-22T22:19:58Z")
}
{
  "_id" : ObjectId("821a7d052738e5415c7fe304"),
  "company_id" : 9,
  "company_name" : "Dell",
  "user_id" : 6,
  "date" : ISODate("2020-10-20T22:19:58Z")
}
```

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

Ans 3.

```
> db.company_drives.aggregate([
... {
...   '$lookup': {
...     'from': 'users',
...     'localField': 'user_id',
...     'foreignField': 'user_id',
...     'as': 'students'
...   }
... }, {
...   '$project': {
...     'company_name': 1,
...     'students': 1
...   }
... }
... ]).pretty()
```

```
{
  "_id" : ObjectId("821a7d052738e5415c7fe301"),
  "company_name" : "Amazon",
  "students" : [
    {
      "_id" : ObjectId("821a665b2738e5415c7fe29f"),
      "user_id" : 7,
      "user_name" : "Lily",
      "mentor_id" : 2,
      "course_id" : 3
    }
  ]
}
{
  "_id" : ObjectId("821a7d052738e5415c7fe311"),
  "company_name" : "sed dui.",
  "students" : [
    {
      "_id" : ObjectId("821a665b2738e5415c7fe2ab"),
      "user_id" : 11,
      "user_name" : "Nyra",
      "mentor_id" : 13,
      "course_id" : 8
    }
  ]
}
```

Activate Windows
Go to Settings to activate Windows.

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

Ans 4.

```
> db.codekata.find().pretty()
{
  "_id" : ObjectId("821a5f012738e5415c7fe1d6"),
  "user_id" : 7,
  "problems" : 60
}
{
  "_id" : ObjectId("821a5f012738e5415c7fe1d3"),
  "user_id" : 16,
  "problems" : 55
}
```

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

Ans 5.

```
> db.mentors.aggregate([
... {
...   '$lookup': {
...     'from': 'users',
...     'localField': 'mentor_id',
...     'foreignField': 'mentor_id',
...     'as': 'students'
...   }
... }, {
...   '$project': {
...     'mentor_id': 1,
...     'mentor_name': 1,
...     'menteeCount': {
...       '$size': '$students'
...     }
...   }
... }, {
...   '$match': {
...     'menteeCount': {
...       '$gt': 15
...     }
...   }
... })
```

Activate Windows
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```
...   'mentor_name': 1,
...   'menteeCount': {
...     '$size': '$students'
...   }
... }, {
...   '$match': {
...     'menteeCount': {
...       '$gt': 15
...     }
...   }
... })
... ]).pretty()

{
  "_id" : ObjectId("821a5e0e2738e5415c7fe1ae"),
  "mentor_id" : 30,
  "mentor_name" : "Sam",
  "menteeCount" : 18
}
```