**Day-4 MongoDB Task [Zen Class]**

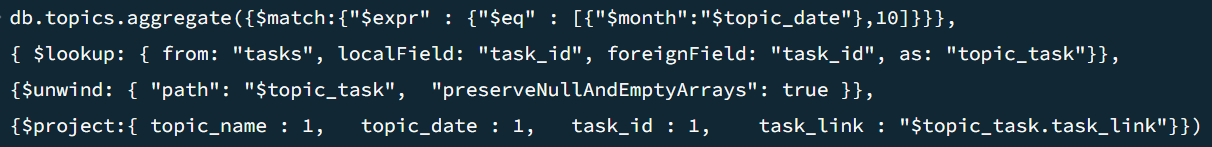
1. **Find all the topics and tasks which are thought in the month of October**

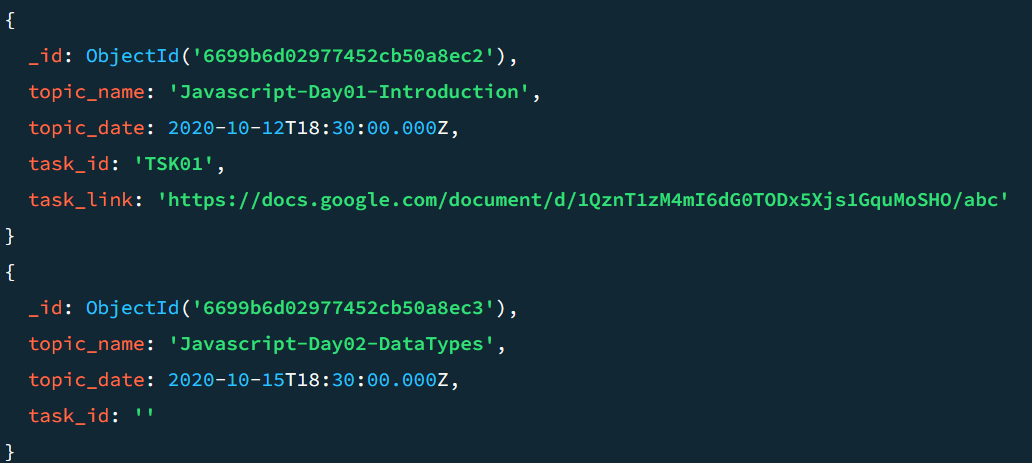
**db.topics.aggregate({$match:{"$expr" : {"$eq" : [{"$month":"$topic\_date"},10]}}},**

**{ $lookup: { from: "tasks", localField: "task\_id", foreignField: "task\_id", as: "topic\_task"}},**

**{$unwind: { "path": "$topic\_task", "preserveNullAndEmptyArrays": true }},**

**{$project:{ topic\_name : 1, topic\_date : 1, task\_id : 1, task\_link : "$topic\_task.task\_link"}})**



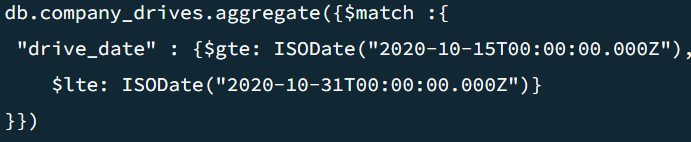
1. **Find all the company drives which appeared between 15 oct-2020 and 31-oct-2020**

**db.company\_drives.aggregate({$match :{**

**"drive\_date" : {$gte: ISODate("2020-10-15T00:00:00.000Z"),**

**$lte: ISODate("2020-10-31T00:00:00.000Z")}**

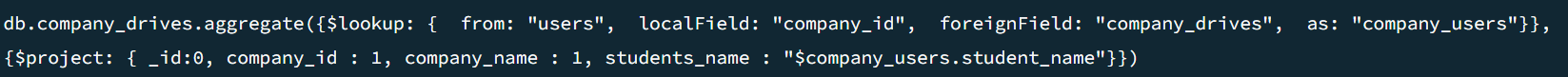
**}})**



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

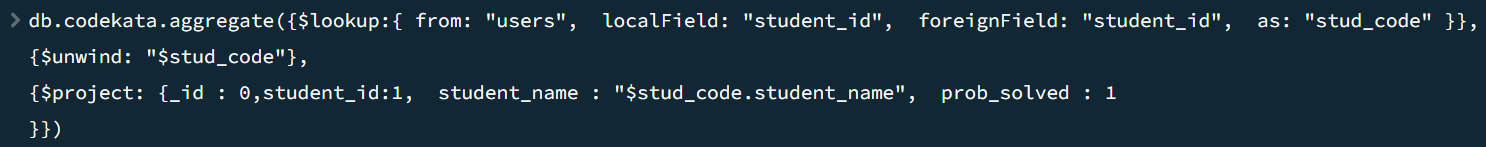
**db.company\_drives.aggregate({$lookup: { from: "users", localField: "company\_id", foreignField: "company\_drives", as: "company\_users"}}, {$project: { \_id:0, company\_id : 1, company\_name : 1, students\_name : "$company\_users.student\_name"}})**

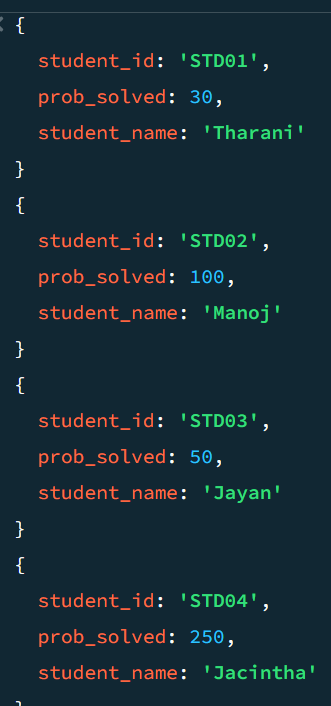
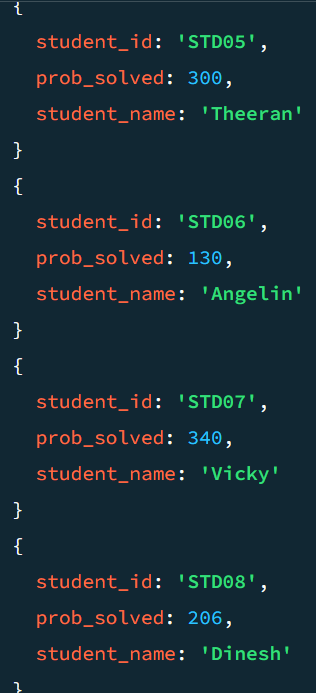
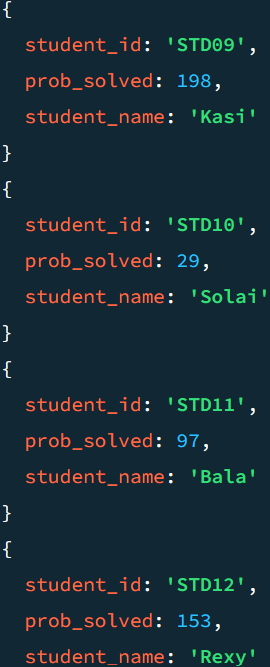
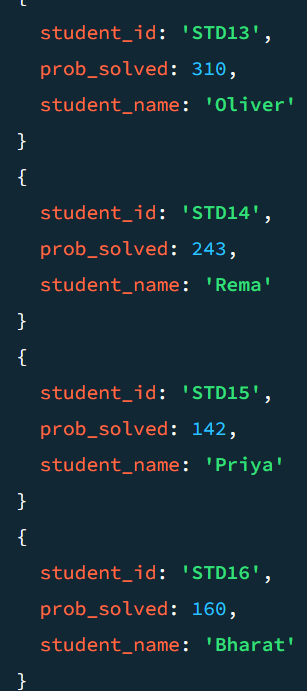


1. **Find the number of problems solved by the user in codekata**

**db.codekata.aggregate({$lookup:{ from: "users", localField: "student\_id", foreignField: "student\_id", as: "stud\_code" }}, {$unwind: "$stud\_code"},{$project: {\_id : 0, student\_id:1, student\_name : "$stud\_code.student\_name", prob\_solved : 1}})**



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

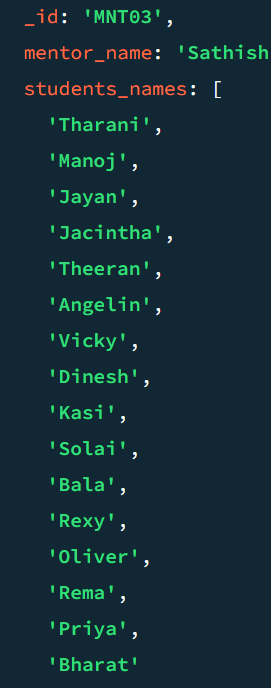
**db.mentors.aggregate({$lookup : { from: "users", localField: "mentor\_id", foreignField: "mentor\_id", as: "mentor\_user"}},**

**{$project: {\_id : 0, mentor\_id:1, mentor\_name :1, stud\_name : "$mentor\_user.student\_name"}},**

**{$group : { \_id: "$mentor\_id", mentor\_name : {$first : "$mentor\_name"}, "students\_names": {"$push": "$stud\_name"}}},**

**{$unwind: "$students\_names"},**

**{$match:{ $expr:{$gt:[{$size: {$ifNull:["$students\_names",[]]}},15]}}})**



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

**db.users\_task.aggregate({$lookup:{ from: "users", localField: "student\_id", foreignField: "student\_id", as: "students"}},**

**{$unwind : "$students"},**

**{$lookup : { from: "attendance", localField: "student\_id", foreignField: "student\_id", as: "user\_attendance"}},**

**{$unwind : "$user\_attendance"},**

**{$project : {\_id : 0, student\_id : 1, student\_name : ("$students.student\_name"), task\_id : 1,**

**task\_submitted\_on:1, crs\_date : "$user\_attendance.crs\_date", isPresent : "$user\_attendance.isPresent"}},**

**{$match : { task\_submitted\_on: {$lte: ISODate("2020-10-15T00:00:00.000Z") },**

**crs\_date: { $lte: ISODate("2020-10-15T00:00:00.000Z") }, isPresent : false}})**

