|  |  |
| --- | --- |
| **Data** | **Query and Output** |
| Student absent and Submitting task in between 15Oct to 31 Oct 2020  /\* 1 createdAt:4/8/2022, 4:09:05 PM\*/  {  "\_id" : ObjectId("625010c97d8490d5270b4425"),  "name" : "GGG",  "placement\_attendence" : "P",  "task\_submission" : "2020-10-31",  "problem\_solved" : 12  },  /\* 2 createdAt:4/8/2022, 4:08:51 PM\*/  {  "\_id" : ObjectId("625010bb7d8490d5270b4424"),  "name" : "FFF",  "placement\_attendence" : "P",  "task\_submission" : "2020-10-15",  "problem\_solved" : 67  },  /\* 3 createdAt:4/8/2022, 4:08:32 PM\*/  {  "\_id" : ObjectId("625010a87d8490d5270b4423"),  "name" : "EEE",  "placement\_attendence" : "P",  "task\_submission" : "2020-10-10",  "problem\_solved" : 0  },  /\* 4 createdAt:4/8/2022, 4:08:04 PM\*/  {  "\_id" : ObjectId("6250108c7d8490d5270b4422"),  "name" : "DDD",  "placement\_attendence" : "A",  "task\_submission" : "2020-10-18",  "problem\_solved" : 24  },  /\* 5 createdAt:4/8/2022, 4:07:44 PM\*/  {  "\_id" : ObjectId("625010787d8490d5270b4421"),  "name" : "CCC",  "placement\_attendence" : "A",  "task\_submission" : "2020-11-03",  "problem\_solved" : 0  },  /\* 6 createdAt:4/8/2022, 4:06:48 PM\*/  {  "\_id" : ObjectId("625010407d8490d5270b4420"),  "name" : "BBB",  "placement\_attendence" : "A",  "task\_submission" : "2020-10-03",  "problem\_solved" : 81  },  /\* 7 createdAt:4/8/2022, 4:06:26 PM\*/  {  "\_id" : ObjectId("6250102a7d8490d5270b441f"),  "name" : "AAA",  "placement\_attendence" : "P",  "task\_submission" : "2020-10-30",  "problem\_solved" : 18  } | Query: db.students.find({$and:[{placement\_attendence:"A"} , {task\_submission:{$gte: '2020-10-15' , $lte:'2020-10-31'}}]});  {  "\_id" : ObjectId("6250108c7d8490d5270b4422"),  "name" : "DDD",  "placement\_attendence" : "A",  "task\_submission" : "2020-10-18",  "problem\_solved" : 24  } |
| 2. Mentor with more than 15 mentee  /\* 1 createdAt:4/8/2022, 6:22:29 PM\*/  {  "\_id" : ObjectId("6250300d7d8490d5270b443e"),  "mentor\_name" : "M4",  "mentees" : "45",  "topic" : "Node.js"  },  /\* 2 createdAt:4/8/2022, 6:22:12 PM\*/  {  "\_id" : ObjectId("62502ffc7d8490d5270b443d"),  "mentor\_name" : "M3",  "mentees" : "15",  "topic" : "JS"  },  /\* 3 createdAt:4/8/2022, 6:21:41 PM\*/  {  "\_id" : ObjectId("62502fdd7d8490d5270b443c"),  "mentor\_name" : "M2",  "mentees" : "3",  "topic" : "DI"  },  /\* 4 createdAt:4/8/2022, 6:21:19 PM\*/  {  "\_id" : ObjectId("62502fc77d8490d5270b443b"),  "mentor\_name" : "M1",  "mentees" : "12",  "topic" : "HTML"  } | Query: db.mentors.find({mentees:{$gt:15}})  Output:  {  "\_id" : ObjectId("6250300d7d8490d5270b443e"),  "mentor\_name" : "M4",  "mentees" : 45,  "topic" : "Node.js"  } |
| 3. NO. of Problems solved by Each Student  /\* 1 createdAt:4/8/2022, 4:09:05 PM\*/  {  "\_id" : ObjectId("625010c97d8490d5270b4425"),  "name" : "GGG",  "placement\_attendence" : "P",  "task\_submission" : "2020-10-31",  "problem\_solved" : 12  },  /\* 2 createdAt:4/8/2022, 4:08:51 PM\*/  {  "\_id" : ObjectId("625010bb7d8490d5270b4424"),  "name" : "FFF",  "placement\_attendence" : "P",  "task\_submission" : "2020-10-15",  "problem\_solved" : 67  },  /\* 3 createdAt:4/8/2022, 4:08:32 PM\*/  {  "\_id" : ObjectId("625010a87d8490d5270b4423"),  "name" : "EEE",  "placement\_attendence" : "P",  "task\_submission" : "2020-10-10",  "problem\_solved" : 0  },  /\* 4 createdAt:4/8/2022, 4:08:04 PM\*/  {  "\_id" : ObjectId("6250108c7d8490d5270b4422"),  "name" : "DDD",  "placement\_attendence" : "A",  "task\_submission" : "2020-10-18",  "problem\_solved" : 24  },  /\* 5 createdAt:4/8/2022, 4:07:44 PM\*/  {  "\_id" : ObjectId("625010787d8490d5270b4421"),  "name" : "CCC",  "placement\_attendence" : "A",  "task\_submission" : "2020-11-03",  "problem\_solved" : 0  },  /\* 6 createdAt:4/8/2022, 4:06:48 PM\*/  {  "\_id" : ObjectId("625010407d8490d5270b4420"),  "name" : "BBB",  "placement\_attendence" : "A",  "task\_submission" : "2020-10-03",  "problem\_solved" : 81  },  /\* 7 createdAt:4/8/2022, 4:06:26 PM\*/  {  "\_id" : ObjectId("6250102a7d8490d5270b441f"),  "name" : "AAA",  "placement\_attendence" : "P",  "task\_submission" : "2020-10-30",  "problem\_solved" : 18  } | Query: db.students.find({{"problem\_solved":1,"name":1,\_id:0}})    Output:  /\* 1 \*/  {  "name" : "AAA",  "problem\_solved" : 18  },  /\* 2 \*/  {  "name" : "BBB",  "problem\_solved" : 81  },  /\* 3 \*/  {  "name" : "CCC",  "problem\_solved" : 0  },  /\* 4 \*/  {  "name" : "DDD",  "problem\_solved" : 24  },  /\* 5 \*/  {  "name" : "EEE",  "problem\_solved" : 0  },  /\* 6 \*/  {  "name" : "FFF",  "problem\_solved" : 67  },  /\* 7 \*/  {  "name" : "GGG",  "problem\_solved" : 12  } |
| 4. Compnay drives between 15 october and 31 Ocy 2020  /\* 1 createdAt:4/8/2022, 6:19:28 PM\*/  {  "\_id" : ObjectId("62502f587d8490d5270b443a"),  "company\_name" : "WWW Enterprises",  "placement\_attendence" : "P",  "company\_visit" : "2020-10-10"  },  /\* 2 createdAt:4/8/2022, 6:19:03 PM\*/  {  "\_id" : ObjectId("62502f3f7d8490d5270b4439"),  "company\_name" : "UUU Enterprises",  "placement\_attendence" : "P",  "company\_visit" : "2020-10-14"  },  /\* 3 createdAt:4/8/2022, 6:18:50 PM\*/  {  "\_id" : ObjectId("62502f327d8490d5270b4438"),  "company\_name" : "VVV Enterprises",  "placement\_attendence" : "A",  "company\_visit" : "2020-10-15"  },  /\* 4 createdAt:4/8/2022, 6:18:36 PM\*/  {  "\_id" : ObjectId("62502f247d8490d5270b4437"),  "company\_name" : "ZZZ Enterprises",  "placement\_attendence" : "P",  "company\_visit" : "2020-10-16"  },  /\* 5 createdAt:4/8/2022, 6:18:21 PM\*/  {  "\_id" : ObjectId("62502f157d8490d5270b4436"),  "company\_name" : "YYY Enterprises",  "placement\_attendence" : "P",  "company\_visit" : "2020-11-6"  },  /\* 6 createdAt:4/8/2022, 6:18:11 PM\*/  {  "\_id" : ObjectId("62502f0b7d8490d5270b4435"),  "company\_name" : "XXX Enterprises",  "placement\_attendence" : "P",  "company\_visit" : "2020-10-6"  } | Query: db.company\_drive.find({company\_visit:{$gte: '2020-10-15' , $lte:'2020-10-31'}});  Output:  /\* 1 createdAt:4/8/2022, 6:18:36 PM\*/  {  "\_id" : ObjectId("62502f247d8490d5270b4437"),  "company\_name" : "ZZZ Enterprises",  "placement\_attendence" : "P",  "company\_visit" : "2020-10-16"  },  /\* 2 createdAt:4/8/2022, 6:18:50 PM\*/  {  "\_id" : ObjectId("62502f327d8490d5270b4438"),  "company\_name" : "VVV Enterprises",  "placement\_attendence" : "A",  "company\_visit" : "2020-10-15"  } |
| 5. Topics taught in October  /\* 1 createdAt:4/8/2022, 5:17:53 PM\*/  {  "\_id" : ObjectId("625020e97d8490d5270b4430"),  "topic" : "HTML",  "date" : "2020-08-15",  "mentor" : "M1"  },  /\* 2 createdAt:4/8/2022, 5:17:36 PM\*/  {  "\_id" : ObjectId("625020d87d8490d5270b442f"),  "topic" : "Node.js",  "date" : "2020-08-05",  "mentor" : "M4"  },  /\* 3 createdAt:4/8/2022, 5:17:16 PM\*/  {  "\_id" : ObjectId("625020c47d8490d5270b442e"),  "topic" : "JS",  "date" : "2020-10-15",  "mentor" : "M3"  },  /\* 4 createdAt:4/8/2022, 5:16:42 PM\*/  {  "\_id" : ObjectId("625020a27d8490d5270b442d"),  "topic" : "DI",  "date" : "2020-10-03",  "mentor" : "M2"  },  /\* 5 createdAt:4/8/2022, 5:16:17 PM\*/  {  "\_id" : ObjectId("625020897d8490d5270b442c"),  "topic" : "React",  "date" : "2020-12-30",  "mentor" : "M1"  } | Query:  db.topics.find({date:{$gte: '2020-10-01' , $lte:'2020-10-31'}});  output:  /\* 1 createdAt:4/8/2022, 5:16:42 PM\*/  {  "\_id" : ObjectId("625020a27d8490d5270b442d"),  "topic" : "DI",  "date" : "2020-10-03",  "mentor" : "M2"  },  /\* 2 createdAt:4/8/2022, 5:17:16 PM\*/  {  "\_id" : ObjectId("625020c47d8490d5270b442e"),  "topic" : "JS",  "date" : "2020-10-15",  "mentor" : "M3"  } |
| 6.tasks taught in October  /\* 1 createdAt:4/8/2022, 5:22:44 PM\*/  {  "\_id" : ObjectId("6250220c7d8490d5270b4434"),  "task\_name" : "Promise Functionality",  "submission\_date" : "2020-12-19",  "difficulty\_level" : "Easy"  },  /\* 2 createdAt:4/8/2022, 5:21:58 PM\*/  {  "\_id" : ObjectId("625021de7d8490d5270b4433"),  "task\_name" : "Call Back Function",  "submission\_date" : "2020-10-19",  "difficulty\_level" : "Medium"  },  /\* 3 createdAt:4/8/2022, 5:21:34 PM\*/  {  "\_id" : ObjectId("625021c67d8490d5270b4432"),  "task\_name" : "Controlled Form",  "submission\_date" : "2020-11-09",  "difficulty\_level" : "Difficult"  },  /\* 4 createdAt:4/8/2022, 5:20:54 PM\*/  {  "\_id" : ObjectId("6250219e7d8490d5270b4431"),  "task\_name" : "Design Page",  "submission\_date" : "2020-10-09",  "difficulty\_level" : "Easy"  } | Query:  db.tasks.find({submission\_date:{$gte: '2020-10-01' , $lte:'2020-10-31'}});  Output:  /\* 1 createdAt:4/8/2022, 5:20:54 PM\*/  {  "\_id" : ObjectId("6250219e7d8490d5270b4431"),  "task\_name" : "Design Page",  "submission\_date" : "2020-10-09",  "difficulty\_level" : "Easy"  },  /\* 2 createdAt:4/8/2022, 5:21:58 PM\*/  {  "\_id" : ObjectId("625021de7d8490d5270b4433"),  "task\_name" : "Call Back Function",  "submission\_date" : "2020-10-19",  "difficulty\_level" : "Medium"  } |
| 7. Company Drives appeared for Placement  /\* 1 createdAt:4/8/2022, 6:19:28 PM\*/  {  "\_id" : ObjectId("62502f587d8490d5270b443a"),  "company\_name" : "WWW Enterprises",  "placement\_attendence" : "P",  "company\_visit" : "2020-10-10"  },  /\* 2 createdAt:4/8/2022, 6:19:03 PM\*/  {  "\_id" : ObjectId("62502f3f7d8490d5270b4439"),  "company\_name" : "UUU Enterprises",  "placement\_attendence" : "P",  "company\_visit" : "2020-10-14"  },  /\* 3 createdAt:4/8/2022, 6:18:50 PM\*/  {  "\_id" : ObjectId("62502f327d8490d5270b4438"),  "company\_name" : "VVV Enterprises",  "placement\_attendence" : "A",  "company\_visit" : "2020-10-15"  },  /\* 4 createdAt:4/8/2022, 6:18:36 PM\*/  {  "\_id" : ObjectId("62502f247d8490d5270b4437"),  "company\_name" : "ZZZ Enterprises",  "placement\_attendence" : "P",  "company\_visit" : "2020-10-16"  },  /\* 5 createdAt:4/8/2022, 6:18:21 PM\*/  {  "\_id" : ObjectId("62502f157d8490d5270b4436"),  "company\_name" : "YYY Enterprises",  "placement\_attendence" : "P",  "company\_visit" : "2020-11-6"  },  /\* 6 createdAt:4/8/2022, 6:18:11 PM\*/  {  "\_id" : ObjectId("62502f0b7d8490d5270b4435"),  "company\_name" : "XXX Enterprises",  "placement\_attendence" : "P",  "company\_visit" : "2020-10-6"  } | Query:  db.company\_drive.find({placement\_attendence:'P'})    Output:  /\* 1 createdAt:4/8/2022, 6:18:11 PM\*/  {  "\_id" : ObjectId("62502f0b7d8490d5270b4435"),  "company\_name" : "XXX Enterprises",  "placement\_attendence" : "P",  "company\_visit" : "2020-10-6"  },  /\* 2 createdAt:4/8/2022, 6:18:21 PM\*/  {  "\_id" : ObjectId("62502f157d8490d5270b4436"),  "company\_name" : "YYY Enterprises",  "placement\_attendence" : "P",  "company\_visit" : "2020-11-6"  },  /\* 3 createdAt:4/8/2022, 6:18:36 PM\*/  {  "\_id" : ObjectId("62502f247d8490d5270b4437"),  "company\_name" : "ZZZ Enterprises",  "placement\_attendence" : "P",  "company\_visit" : "2020-10-16"  },  /\* 4 createdAt:4/8/2022, 6:19:03 PM\*/  {  "\_id" : ObjectId("62502f3f7d8490d5270b4439"),  "company\_name" : "UUU Enterprises",  "placement\_attendence" : "P",  "company\_visit" : "2020-10-14"  },  /\* 5 createdAt:4/8/2022, 6:19:28 PM\*/  {  "\_id" : ObjectId("62502f587d8490d5270b443a"),  "company\_name" : "WWW Enterprises",  "placement\_attendence" : "P",  "company\_visit" : "2020-10-10"  } |
| 8. Placement attended by Students  /\* 1 createdAt:4/8/2022, 4:09:05 PM\*/  {  "\_id" : ObjectId("625010c97d8490d5270b4425"),  "name" : "GGG",  "placement\_attendence" : "P",  "task\_submission" : "2020-10-31",  "problem\_solved" : 12  },  /\* 2 createdAt:4/8/2022, 4:08:51 PM\*/  {  "\_id" : ObjectId("625010bb7d8490d5270b4424"),  "name" : "FFF",  "placement\_attendence" : "P",  "task\_submission" : "2020-10-15",  "problem\_solved" : 67  },  /\* 3 createdAt:4/8/2022, 4:08:32 PM\*/  {  "\_id" : ObjectId("625010a87d8490d5270b4423"),  "name" : "EEE",  "placement\_attendence" : "P",  "task\_submission" : "2020-10-10",  "problem\_solved" : 0  },  /\* 4 createdAt:4/8/2022, 4:08:04 PM\*/  {  "\_id" : ObjectId("6250108c7d8490d5270b4422"),  "name" : "DDD",  "placement\_attendence" : "A",  "task\_submission" : "2020-10-18",  "problem\_solved" : 24  },  /\* 5 createdAt:4/8/2022, 4:07:44 PM\*/  {  "\_id" : ObjectId("625010787d8490d5270b4421"),  "name" : "CCC",  "placement\_attendence" : "A",  "task\_submission" : "2020-11-03",  "problem\_solved" : 0  },  /\* 6 createdAt:4/8/2022, 4:06:48 PM\*/  {  "\_id" : ObjectId("625010407d8490d5270b4420"),  "name" : "BBB",  "placement\_attendence" : "A",  "task\_submission" : "2020-10-03",  "problem\_solved" : 81  },  /\* 7 createdAt:4/8/2022, 4:06:26 PM\*/  {  "\_id" : ObjectId("6250102a7d8490d5270b441f"),  "name" : "AAA",  "placement\_attendence" : "P",  "task\_submission" : "2020-10-30",  "problem\_solved" : 18  } | Query:  db.students.find({placement\_attendence:"P"});    Output:  /\* 1 createdAt:4/8/2022, 4:09:05 PM\*/  {  "\_id" : ObjectId("625010c97d8490d5270b4425"),  "name" : "GGG",  "placement\_attendence" : "P",  "task\_submission" : "2020-10-31",  "problem\_solved" : 12  },  /\* 2 createdAt:4/8/2022, 4:08:51 PM\*/  {  "\_id" : ObjectId("625010bb7d8490d5270b4424"),  "name" : "FFF",  "placement\_attendence" : "P",  "task\_submission" : "2020-10-15",  "problem\_solved" : 67  },  /\* 3 createdAt:4/8/2022, 4:08:32 PM\*/  {  "\_id" : ObjectId("625010a87d8490d5270b4423"),  "name" : "EEE",  "placement\_attendence" : "P",  "task\_submission" : "2020-10-10",  "problem\_solved" : 0  },  /\* 4 createdAt:4/8/2022, 4:06:26 PM\*/  {  "\_id" : ObjectId("6250102a7d8490d5270b441f"),  "name" : "AAA",  "placement\_attendence" : "P",  "task\_submission" : "2020-10-30",  "problem\_solved" : 18  } |