**Mongo DB task - Day 2**

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| **Design database for Zen class programme** |
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| use zen\_db |
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| **Users** |  |
| db.users.insertMany([{user\_id:101,user\_name:"Ajay",user\_email:"ajay@gmail.com",user\_mobile:"9875434567",user\_gender:"male"},{user\_id:102,user\_name:"Bina",user\_email:"bina@gmail.com",user\_mobile:"9267485982",user\_gender:"female"},{user\_id:103,user\_name:"Ram",user\_email:"ram@gmail.com",user\_mobile:"7654897654",user\_gender:"male"},{user\_id:104,user\_name:"Jai",user\_email:"jai@gmail.com",user\_mobile:"8735445278",user\_gender:"male"},{user\_id:105,user\_name:"Anne",user\_email:"anne@gmail.com",user\_mobile:"8976123098",user\_gender:"female"},{user\_id:106,user\_name:"Joe",user\_email:"joe@gmail.com",user\_mobile:"9875434566",user\_gender:"male"},{user\_id:107,user\_name:"mark",user\_email:"mark@gmail.com",user\_mobile:"9267485980",user\_gender:"male"},{user\_id:108,user\_name:"Andrew",user\_email:"andrew@gmail.com",user\_mobile:"7654897650",user\_gender:"male"},{user\_id:109,user\_name:"Jack",user\_email:"jack@gmail.com",user\_mobile:"8735445270",user\_gender:"male"}]) |  |

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| **Codekata** |
| db.codekata.insertMany([{prob\_id:"PB101",problem\_desc:"print all prime numbers from 1 to 10",solved\_count:3,submission\_count:5,users\_solved:[101,102,103]},{prob\_id:"PB102",problem\_desc:"print all numbers from 1 to 100 using for loop",solved\_count:5,submission\_count:5,users\_solved:[101,102,103,104,105]},{prob\_id:"PB103",problem\_desc:"print the odd series less than 10",solved\_count:2,submission\_count:3,users\_solved:[105,104]},{ prob\_id:"PB104",problem\_desc:"print the odd numbers in given array arr=[1,2,3,4,5,6,6,7,8]",solved\_count:7,submission\_count:7,users\_solved:[109,108,107,106,105,104,103]},{ prob\_id:"PB105",problem\_desc:"print all the even numbers till 100",solved\_count:3,submission\_count:4,users\_solved:[105,106,107]}]) |

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| **Attendance** |
| db.attendance.insertMany([{topic\_date:new Date("2020-10-01"),absent\_count:2,students\_absent:[101,102], task\_submission\_count:6,task\_defaulters:[101,102,103],task\_defaulters\_count:3},{ topic\_date:new Date("2020-10-10"),absent\_count:0,students\_absent:[], task\_submission\_count:5,task\_defaulters:[109,108,107,106], task\_defaulters\_count:4},{ topic\_date:new Date("2020-10-16"),absent\_count:1,students\_absent:[103], task\_submission\_count:1,task\_defaulters:[103], task\_defaulters\_count:1},{ topic\_date:new Date("2020-10-21"),absent\_count:4,students\_absent:[106,109,104,101], task\_submission\_count:9,task\_defaulters:[], task\_defaulters\_count:0},{ topic\_date:new Date("2020-10-26"),absent\_count:1,students\_absent:[105], task\_submission\_count:7,task\_defaulters:[105,107], task\_defaulters\_count:2}]) |

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| **Topics** |
| db.topics.insertMany([{topic\_id:"TP101",topic\_name:"HTML",topic\_date:new Date("2020-10-01"),associated\_task:"TS101"}, {topic\_id:"TP102",topic\_name:"CSS",topic\_date:new Date("2020-10-10"),associated\_task:"TS102"},{topic\_id:"TP103",topic\_name:"JS",topic\_date:new Date("2020-10-16"),associated\_task:"TS103"},{ topic\_id:"TP104",topic\_name:"React",topic\_date:new Date("2020-10-21"),associated\_task:"TS104"},{ topic\_id:"TP105",topic\_name:"SQL",topic\_date:new Date("2020-10-26"),associated\_task:"TS105"}]) |

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| **Tasks** |
| db.tasks.insertMany([{task\_id:"TS101",task\_desc:"Create a simple HTML contact form",task\_exp\_date:new Date("2020-10-03")},{ task\_id:"TS102",task\_desc:"Design the contact form with inline CSS",task\_exp\_date:new Date("2020-10-13")},{ task\_id:"TS103",task\_desc:"Complete 4 JS problems in codekata",task\_exp\_date:new Date("2020-10-19")},{ task\_id:"TS104",task\_desc:"Create a responsive React Page",task\_exp\_date:new Date("2020-10-24")},{ task\_id:"TS105",task\_desc:"Create a simple HTML contact form",task\_exp\_date:new Date("2020-10-29")}]) |

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| **company\_drives** |
| db.company\_drives.insertMany([{drive\_id:"CD101",company\_name:"RedHat",when:new Date("2020-10-05"),rounds:4,users\_attended:[{user\_id:101,user\_name:"Ajay"},{user\_id:102,user\_name:"Bina"},{user\_id:103,user\_name:"Ram"},{user\_id:104,user\_name:"Jai"},{user\_id:105,user\_name:"Anne"},{user\_id:106,user\_name:"Joe"},{user\_id:107,user\_name:"mark"},{user\_id:109,user\_name:"Jack"}]},{drive\_id:"CD102",company\_name:"Zoho",when:new Date("2020-10-10"),rounds:5,users\_attended:[{user\_id:101,user\_name:"Ajay"},{user\_id:102,user\_name:"Bina"},{user\_id:103,user\_name:"Ram"},{user\_id:104,user\_name:"Jai"},{user\_id:105,user\_name:"Anne"},{user\_id:106,user\_name:"Joe"},{user\_id:107,user\_name:"mark"},{user\_id:109,user\_name:"Jack"}]},{drive\_id:"CD103",company\_name:"Google",when:new Date("2020-10-19"),rounds:9,users\_attended:[{user\_id:101,user\_name:"Ajay"},{user\_id:102,user\_name:"Bina"},{user\_id:103,user\_name:"Ram"},{user\_id:104,user\_name:"Jai"},{user\_id:105,user\_name:"Anne"},{user\_id:106,user\_name:"Joe"},{user\_id:107,user\_name:"mark"},{user\_id:109,user\_name:"Jack"}]},{drive\_id:"CD104",company\_name:"Microsoft",when:new Date("2020-10-21"),rounds:4,users\_attended:[{user\_id:101,user\_name:"Ajay"},{user\_id:102,user\_name:"Bina"},{user\_id:103,user\_name:"Ram"},{user\_id:104,user\_name:"Jai"},{user\_id:105,user\_name:"Anne"},{user\_id:106,user\_name:"Joe"},{user\_id:107,user\_name:"mark"},{user\_id:108,user\_name:"Andrew"},{user\_id:109,user\_name:"Jack"}]},{drive\_id:"CD105",company\_name:"Apple",when:new Date("2020-10-25"),rounds:3,users\_attended:[{user\_id:101,user\_name:"Ajay"}]},{drive\_id:"CD106",company\_name:"Tesla",when:new Date("2020-10-29"),rounds:2,users\_attended:[{user\_id:102,user\_name:"Bina"},{user\_id:103,user\_name:"Ram"},{user\_id:104,user\_name:"Jai"},{user\_id:105,user\_name:"Anne"},{user\_id:106,user\_name:"Joe"},{user\_id:107,user\_name:"mark"},{user\_id:108,user\_name:"Andrew"},{user\_id:109,user\_name:"Jack"}]}]) |

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| **Mentors** |
| db.mentors.insertMany([{mentor\_id:"M101",name:"Anu",email:"anu@gmail.com",mobile:"9873450987",gender:"female",students\_mapped:[101,102]},{mentor\_id:"M102",name:"Bindhu",email:"bindhu@gmail.com",mobile:"9056764324",gender:"female",students\_mapped:[103,104]},{mentor\_id:"M103",name:"Rithik",email:"rithik@gmail.com",mobile:"7654897656",gender:"male",students\_mapped:[105]},{mentor\_id:"M104",name:"John",email:"john@gmail.com",mobile:"8735445271",gender:"male",students\_mapped:[107,108]},{mentor\_id:"M105",name:"Ajith",email:"ajith@gmail.com",mobile:"8976123090",gender:"male", students\_mapped:[109]}]) |
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| **Find all the topics and tasks which are thought in the month of October** |
| db.topics.find({topic\_date:{$lte:ISODate("2020-10-31T00:00:00Z"),$gte:ISODate("2020-10-15T00:00:00Z")}}).pretty();  db.tasks.find({task\_exp\_date:{$lte:ISODate("2020-10-31T00:00:00Z"),$gte:ISODate("2020-10-01T00:00:00Z")}}).pretty(); |
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| **Find all the company drives which appeared between 15 oct-2020 and 31-oct-2020** |
| db.company\_drives.find({when:{$lte:ISODate("2020-10-31T00:00:00Z"),$gte:ISODate("2020-10-15T00:00:00Z")}}) |

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| **Find all the company drives and students who are appeared for the placement.** |
| db.company\_drives.find({},{drive\_id:1,company\_name:1,rounds:1,users\_attended:1}) |

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| Find the number of problems solved by the user in codekata |
| db.codekata.find({users\_solved:101}).count() |
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| **Find all the mentors with who has the mentee's count more than 1** |
| db.mentors.find({students\_mapped:{$exists:true},$where:'this.students\_mapped.length>1'}).pretty() |

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

db.attendance.find({topic\_date:{$lte:ISODate("2020-10-31T00:00:00Z"),$gte:ISODate("2020-10-15T00:00:00Z")}},{topic\_date:1,absent\_count:1,task\_defaulters\_count:1})

