***Day-32***

**Design database for Zen class programme**

users

codekata

attendance

topics

tasks

company\_drives

mentors

**create collection users and insert data**

db.createCollection("users");

db.users.insertMany([

{

userid:1,

name:"Sugumar",

email:sugumar@gmail.com",

},

{

userid:2,

name:"Gayathri",

email:"gayathri@gmail.com",

},

{

userid:3,

name:"Devi",

email:"devi@gmail.com",

},

{

userid:4,

name:"yakshini",

email:"yakshini@gmail.com",

},

{

userid:5,

name:"Mahalakshmi",

email:"mahalakshmi@gmail.com",

}

])

**create collection codekata and insert data**

db.createCollection("codekata");

db.codekata.insertMany([

{

userid:1,

problems:80

},

{

userid:2,

problems:110

},

{

userid:3,

problems:95

},

{

userid:4,

problems:55

},

{

userid:5,

problems:75

}

])

**create collection topics and insert data**

db.createCollection("topics");

db.topics.insertMany([

{

topicid:1,

topic:"HTML",

topic\_date:new Date("4-oct-2021")

},

{

topicid:2,

topic:"CSS",

topic\_date:new Date("11-oct-2021")

},

{

topicid:3,

topic:"Bootstrap",

topic\_date:new Date("18-oct-2021")

},

{

topicid:4,

topic:"JavaScript",

topic\_date:new Date("25-oct-2021")

},

{

topicid:5,

topic:"React JS",

topic\_date:new Date("10-oct-2021")

}

])

**create collection tasks and insert data**

db.createCollection("tasks");

db.tasks.insertMany([

{

taskid:1,

topicid:1,

userid:1,

task:"HTML task",

due\_date:new Date("4-oct-2021"),

submitted:true

},

{

taskid:2,

topicid:2,

userid:2,

task:"CSS task",

due\_date:new Date("11-oct-2021"),

submitted:true

},

{

taskid:3,

topicid:3,

userid:3,

task:"Bootstrap task",

due\_date:new Date("18-oct-2021"),

submitted:false

},

{

taskid:4,

topicid:4,

userid:4,

task:"JavaScript task",

due\_date:new Date("25-oct-2021"),

submitted:true

},

{

taskid:5,

topicid:5,

userid:5,

task:"React JS task",

due\_date:new Date("10-oct-2021"),

submitted:false

}

])

**create collection attendance and insert data**

db.createCollection("attendance");

db.attendance.insertMany([

{

userid:1,

topicid:2,

attended:true

},

{

userid:2,

topicid:1,

attended:true

},

{

userid:3,

topicid:5,

attended:false

},

{

userid:4,

topicid:3,

attended:true

},

{

userid:5,

topicid:4,

attended:false

}

])

**create collection mentors and insert data**

db.createCollection("mentors");

db.mentors.insertMany([

{

mentorid:1,

mentorname:"Mohan",

mentor\_email:"mohan@gmail.com",

mentee\_count: 15

},

{

mentorid:2,

mentorname:"TamilSelvan Sekar",

mentor\_email:"tamilselvan@gmail.com",

mentee\_count:20

},

{

mentorid:3,

mentorname:"Ramkumar Manavalan",

mentor\_email:"ramkumar@gmail.com",

mentee\_count:10

},

{

mentorid:4,

mentorname:"Muthuraman",

mentor\_email:"muthuraman@gmail.com",

mentee\_count:18

},

{

mentorid:5,

mentorname:"Prasanna",

mentor\_email:"prasanna@gmail.com",

mentee\_count:25

}

])

**create collection company drives and insert data**

db.createCollection("companydrives");

db.comapnydrives.insertMany([

{

userid:1,

drive\_date:new Date("5-oct-2021"),

company:"TCS"

},

{

userid:1,

drive\_date:new Date("18-oct-2021"),

company:"HCL"

},

{

userid:2,

drive\_date:new Date("23-oct-2021"),

company:"Amazon"

},

{

userid:3,

drive\_date:new Date("28-oct-2021"),

company:"Wipro"

},

{

userid:4,

drive\_date:new Date("2-nov-2021"),

company:"ITC"

}

])

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

db.topics.aggregate([

{

$lookup: {

from: "tasks",

localField: "topicid",

foreignField: "topicid",

as: "taskinfo"

}

},

{

$match:{$and:[{$or:[{topic\_date:{$gt:new Date("30-sep-2021)}},{topic\_date:{$lt:new Date("1-nov-2021")}}]},

{$or:[{"taskinfo.due\_date":{$gt:new Date("30-sep-2021")}},{"taskinfo.due\_date":{$lt:new Date("1-nov-2021")}}]}

]}

}

])

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

db.comapnydrives.find({$or:[{drive\_date:{$gte:new Date("15-oct-2021")}},

{drive\_date:{$lte:new Date("31-0ct-2021")}}]})

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

db.comapnydrives.aggregate([

{

$lookup: {

from:"users",

localField:"userid",

foreignField:"userid",

as :"userinfo"

}

},

{

$project:{

\_id:0,

"userinfo.name":1,

company:1,

drive\_date:1,

"userinfo.email":1,

"userinfo.userid":1

}

}

])

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

db.codekata.aggregate([

{

$lookup: {

from: "users",

localField: "userid",

foreignField: "userid",

as: "userinfo"

}

},

{

$project:{

\_id:0,userid:1,problems:1,"userinfo.name":1

}

}

])

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

db.users.aggregate([

{$lookup: {

from: "mentors",

localField: "mentorid",

foreignField: "mentorid",

as: "mentorInfo"

}},

{$group:{\_id:{mentorid:"$mentorInfo.mentorid",mentorname:"$mentorInfo.mentorname"},mentee\_count:{$sum:1}}},

{$match:{mentee\_count:{$gt:15}}},

])