**# Database-Design-Zen-Class**

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**1. Create tables for the below list given**

**(users**

**codekata**

**attendance**

**topics**

**tasks**

**company\_drives**

**mentors**

**students\_activated\_courses**

**courses)**

**2.Insert at least 5 rows of values in each Table Design DB model for Guvi Zen class**

**\*\*\*\*\*\*\*\*\*\*\*\*Both 1 & 2 are answered \*\*\*\*\*\*\*\*\*\*\*\***

**\*\*\*\*\*\*\*\*\*\*\*\*Creation and insertion are done 1 after other\*\*\*\*\*\*\*\*\*\*\*\***

**use Students;**

**-- USERS------>**

**CREATE TABLE users(userid INT AUTO\_INCREMENT PRIMARY KEY,**

**username VARCHAR(100),**

**userEmail VARCHAR(100),**

**batchid INT);**

**INSERTING VALUES INTO USERS------------------>**

**INSERT INTO users(username,useremail,batchid) VALUES("Atchay","atchays07@gmail.com",52),**

**INSERT INTO users(username,useremail,batchid) VALUES("Saranya","saranya123@gmail.com",52),**

**INSERT INTO users(username,useremail,batchid) VALUES("Amirtha","amirtha99@gmail.com",52),**

**INSERT INTO users(username,useremail,batchid) VALUES("deepa","deepa@gmail.com",51),**

**INSERT INTO users(username,useremail,batchid) VALUES("Samuel","Samuel@gmail.com",51);**

**<----Codekata---->**

**CREATE TABLE codekata(userid INTEGER,**

**number\_of\_problems\_solved INTEGER,**

**FOREIGN KEY (userid) REFERENCES users(userid)**

**);**

**INSERTING VALUES INTO CODEKATA------------------>**

**INSERT INTO codekata(userid,number\_of\_problems\_solved) VALUES(1,50),**

**INSERT INTO codekata(userid,number\_of\_problems\_solved) VALUES(2,60),**

**INSERT INTO codekata(userid,number\_of\_problems\_solved) VALUES(3,30),**

**INSERT INTO codekata(userid,number\_of\_problems\_solved) VALUES(4,40),**

**INSERT INTO codekata(userid,number\_of\_problems\_solved) VALUES(5,75);**

**--Company drives---->**

**CREATE TABLE company\_drives(**

**driveid INTEGER AUTO\_INCREMENT PRIMARY KEY,**

**userid INTEGER,**

**drive\_date DATE,c**

**ompany VARCHAR(100),**

**FOREIGN KEY (userid) REFERENCES users(userid)**

**);**

**INSERT INTO company\_drives(userid,drive\_date,company) VALUES (3,"2023-1-13","Microsofts"),**

**INSERT INTO company\_drives(userid,drive\_date,company) VALUES (1,"2023-2-17","HCL"),**

**INSERT INTO company\_drives(userid,drive\_date,company) VALUES (2,"2023-2-15","TCS"),**

**INSERT INTO company\_drives(userid,drive\_date,company) VALUES (2,"2023-3-20","ZEN"),**

**INSERT INTO company\_drives(userid,drive\_date,company) VALUES (5,"2023-3-30","Guvi");**

**-- Mentors**

**CREATE TABLE mentors(**

**mentorid INTEGER AUTO\_INCREMENT PRIMARY KEY,**

**mentorname VARCHAR(100),**

**mentoremail VARCHAR(100)**

**);**

**INSERT INTO mentors(mentorname,mentoremail) VALUES ("Sanjay","sanjay123@gmail.com"),**

**INSERT INTO mentors(mentorname,mentoremail) VALUES ("Sundeep","sandeep24@gmail.com"),**

**INSERT INTO mentors(mentorname,mentoremail) VALUES ("Deepika","deepi985@gmail.com"),**

**INSERT INTO mentors(mentorname,mentoremail) VALUES ("Priya","priya78@gmail.com"),**

**INSERT INTO mentors(mentorname,mentoremail) VALUES ("Akash","akash07\*@gmail.com");**

**-- Topic**

**CREATE TABLE topics(**

**topicid INTEGER AUTO\_INCREMENT PRIMARY KEY,**

**topic VARCHAR(200),**

**topic\_date DATE,mentorid INTEGER,**

**batchid INTEGER,**

**FOREIGN KEY (mentorid) REFERENCES mentors(mentorid)**

**);**

**INSERT INTO topics(topic,topic\_date,mentorid,batchid) VALUES("HTML Basics","2023-08-1",1,52),**

**INSERT INTO topics(topic,topic\_date,mentorid,batchid) VALUES("CSS Basics","2023-08-2",2,52),**

**INSERT INTO topics(topic,topic\_date,mentorid,batchid) VALUES("Bootstrap-Grid","2023-08-3",3,52),**

**INSERT INTO topics(topic,topic\_date,mentorid,batchid) VALUES("JavaScript","2023-08-5",4,51),**

**INSERT INTO topics(topic,topic\_date,mentorid,batchid) VALUES("React-component","2023-08-7",5,51);**

**-- Tasks**

**CREATE TABLE tasks(**

**taskid INTEGER AUTO\_INCREMENT PRIMARY KEY,**

**topicid INTEGER,**

**task VARCHAR(1000),**

**batchid INTEGER,**

**FOREIGN KEY (topicid) REFERENCES topics(topicid)**

**);**

**INSERT INTO tasks(topicid,task,batchid) VALUES (1,"HTML Task",52),**

**INSERT INTO tasks(topicid,task,batchid) VALUES (2,"CSS Task",52),**

**INSERT INTO tasks(topicid,task,batchid) VALUES (3,"Bootstrap Task",52),**

**INSERT INTO tasks(topicid,task,batchid) VALUES (4,"JavaScript Task",51),**

**INSERT INTO tasks(topicid,task,batchid) VALUES (5,"React Task",51);**

**-- Attendance**

**CREATE TABLE attendance(attendanceid INTEGER AUTO\_INCREMENT PRIMARY KEY,**

**userid INTEGER,**

**courseid INTEGER,**

**topicsid INTEGER, attended BOOLEAN,**

**FOREIGN KEY (userid) REFERENCES users(userid),**

**FOREIGN KEY (topicsid) REFERENCES topics(topicsid),**

**FOREIGN KEY (courseid) REFERENCES courses(courseid)**

**);**

**INSERT INTO attendance(userid,courseid,topicsid,attended) VALUES(2,4,5,true),**

**INSERT INTO attendance(userid,courseid,topicsid,attended) VALUES(1,2,5,true),**

**INSERT INTO attendance(userid,courseid,topicsid,attended) VALUES(3,3,7,false),**

**INSERT INTO attendance(userid,courseid,topicsid,attended) VALUES(4,8,4,true),**

**INSERT INTO attendance(userid,courseid,topicsid,attended) VALUES(8,1,2,false),**

**INSERT INTO attendance(userid,courseid,topicsid,attended) VALUES(9,3,5,true),**

**Query--------------------------->>>>>>>>>>>>>>.......**

**CREATE TABLE queries(queryid INTEGER AUTO\_INCREMENT PRIMARY KEY ,**

**userid INTEGER,**

**querybody VARCHAR(1000),mentorid INTEGER,**

**FOREIGN KEY (userid) REFERENCES users(userid),**

**FOREIGN KEY (mentorid) REFERENCES mentors(mentorid)**

**);**

**INSERT INTO queries(userid,querybody,mentorid) VALUES(1,"query about HTML",1),**

**INSERT INTO queries(userid,querybody,mentorid) VALUES(2,"query about CSS",5),**

**INSERT INTO queries(userid,querybody,mentorid) VALUES(3,"query about Bootstrap",4),**

**INSERT INTO queries(userid,querybody,mentorid) VALUES(5,"query about JavaScript",3),**

**INSERT INTO queries(userid,querybody,mentorid) VALUES(4,"query about React",2);**

**Students activated courses\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_>>>>>>>>>>>>>>>>>>>>>>>>>**

**CREATE TABLE students\_activated\_courses(id INTEGER AUTO\_INCREMENT PRIMARY KEY,userid INTEGER,courseid INTEGER,**

**FOREIGN KEY (userid) REFERENCES users(userid),**

**FOREIGN KEY (courseid) REFERENCES courses(courseid)**

**);**

**Students activated courses\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_>>>>>>>>>>>>>>>>>>>>>>>>**

**INSERT INTO students\_activated\_courses(userid,courseid) VALUES(1,1),(2,1),(3,5),(4,2),(5,3);**

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**3. Get number problems solved in codekata by combining the users**

**use students;**

**SELECT users.userid, users.username,users.useremail, codekata.number\_of\_problems**

**FROM users**

**INNER JOIN codekata ON users.userid = codekata.userid;**

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**4.Display the no of company drives attended by a user**

**use students;**

**SELECT userid ,COUNT(userid) FROM company\_drives GROUP BY userid;**

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**5. Combine and display students\_activated\_courses and courses for a specific user groping them based on the course**

**use students;**

**SELECT students\_activated\_courses.userid,students\_activated\_courses.courseid,**

**COUNT(students\_activated\_courses.courseid) ,courses.coursename**

**FROM students\_activated\_courses**

**INNER JOIN courses**

**ON students\_activated\_courses.courseid=courses.courseid**

**WHERE students\_activated\_courses.userid=1**

**GROUP BY courses.courseid;**

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**6 .List all the mentors**

**use students;**

**SELECT mentorname FROM mentors;**

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**7.List the number of students that are assigned for a mentor**

**USE students;**

**SELECT mentors.mentorid,mentors.mentorname,COUNT(users.mentorid)**

**FROM mentors,users**

**WHERE mentors.mentorid=users.mentorid**

**GROUP BY mentors.mentorid;**

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