DB MODEL FOR ZENCLASS PROGRAMMERS

**USERS:**

CREATE TABLE users (

user\_id INT PRIMARY KEY,

name VARCHAR(100),

email VARCHAR(100),

mentor\_id INT,

FOREIGN KEY (mentor\_id) REFERENCES mentors(mentor\_id)

);

**Codekata:**

CREATE TABLE codekata (

user\_id INT,

problems\_solved INT,

FOREIGN KEY (user\_id) REFERENCES users(user\_id)

);

**Attendance:**

CREATE TABLE attendance (

attendance\_id INT PRIMARY KEY,

user\_id INT,

date DATE,

status VARCHAR(10), -- 'present' or 'absent'

FOREIGN KEY (user\_id) REFERENCES users(user\_id)

);

**Topics:**

CREATE TABLE topics (

topic\_id INT PRIMARY KEY,

name VARCHAR(100),

date DATE

);

**Tasks:**

CREATE TABLE tasks (

task\_id INT PRIMARY KEY,

name VARCHAR(100),

topic\_id INT,

date DATE,

FOREIGN KEY (topic\_id) REFERENCES topics(topic\_id)

);

**company\_drives:**

CREATE TABLE company\_drives (

drive\_id INT PRIMARY KEY,

company\_name VARCHAR(100),

date DATE

);

**Mentors:**

CREATE TABLE mentors (

mentor\_id INT PRIMARY KEY,

name VARCHAR(100)

);

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

SELECT t.name AS topic\_name, tk.name AS task\_name, tk.date

FROM topics t

JOIN tasks tk ON t.topic\_id = tk.topic\_id

WHERE MONTH(t.date) = 10;

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

SELECT \*

FROM company\_drives

WHERE date BETWEEN '2020-10-15' AND '2020-10-31';

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

SELECT cd.company\_name, p.user\_id

FROM company\_drives cd

JOIN placements p ON cd.drive\_id = p.drive\_id;

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

SELECT user\_id, problems\_solved

FROM codekata;

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

SELECT m.mentor\_id, m.name, COUNT(u.user\_id) AS mentee\_count

FROM mentors m

JOIN users u ON m.mentor\_id = u.mentor\_id

GROUP BY m.mentor\_id, m.name

HAVING COUNT(u.user\_id) > 15;

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

SELECT COUNT(DISTINCT a.user\_id) AS user\_count

FROM attendance a

LEFT JOIN tasks t ON a.user\_id = t.user\_id AND t.date = a.date

WHERE a.date BETWEEN '2020-10-15' AND '2020-10-31'

AND a.status = 'absent'

AND t.task\_id IS NULL;