**SQL-GUVI-DB**

**Description:**

This SQL script sets up a relational database schema for managing information about mentors, batches, learners, marks, courses, and tasks.

**Table Creation:**

**mentors:** Stores mentor information (mentor\_id, mentor\_name).

**batches**: Stores batch information (batch\_id, batch\_name).

**learner:** Stores learner information (learner\_id, learner\_name, mentor\_id, batch\_id, course\_id, task\_id) with foreign key constraints referencing mentors, batches, course, and tasks tables.

**course:** Stores course information (course\_id, course\_name).

**tasks:** Stores task information (task\_id, task\_name, course\_id) with a foreign key constraint referencing the course table.

**marks:** Initially created without a foreign key constraint for task\_id, later added with a foreign key constraint referencing the tasks table.

**Table Alteration:**

**Adding Columns:** learner table has a column mark\_id added to store mark primary keys. marks table has a column task\_id added to store task primary keys.

**Adding Foreign Key Constraint:** A foreign key constraint named mark\_constraint\_name is added to the marks table ensuring referential integrity with the tasks table.

**Description Commands:**

**DESC learner;: Displays the structure of the learner table.**

**DESC marks;: Displays the structure of the marks table.**

**DESC tasks;: Displays the structure of the tasks table.**

**SQL QUERY:**

CREATE TABLE mentors(

mentor\_id INT PRIMARY KEY,

mentor\_name VARCHAR(255));

CREATE TABLE batches(

batch\_id INT PRIMARY KEY,

batch\_name VARCHAR(255));

CREATE TABLE learner(

learner\_id INT PRIMARY KEY,

learner\_name VARCHAR(255),

mentor\_id INT,

batch\_id INT,

course\_id INT,

task\_id INT,

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

FOREIGN KEY(batch\_id)REFERENCES batches(batch\_id),

FOREIGN KEY(course\_id)REFERENCES course(course\_id),

FOREIGN KEY(task\_id)REFERENCES tasks(task\_id));

ALTER TABLE learner add COLUMN (mark\_id INT);

DESC learner;

CREATE TABLE marks(

mark\_id INT PRIMARY KEY,

learner\_id INT,

FOREIGN KEY(learner\_id) REFERENCES learner(learner\_id),

marks INT);

desc marks;

CREATE TABLE course(

course\_id INT PRIMARY KEY,

course\_name VARCHAR(255));

CREATE TABLE tasks(

task\_id INT PRIMARY KEY,

task\_name VARCHAR(255),

course\_id INT,

FOREIGN KEY(course\_id)REFERENCES course(course\_id));

desc tasks;

ALTER TABLE marks ADD column (task\_id INT);

ALTER TABLE marks

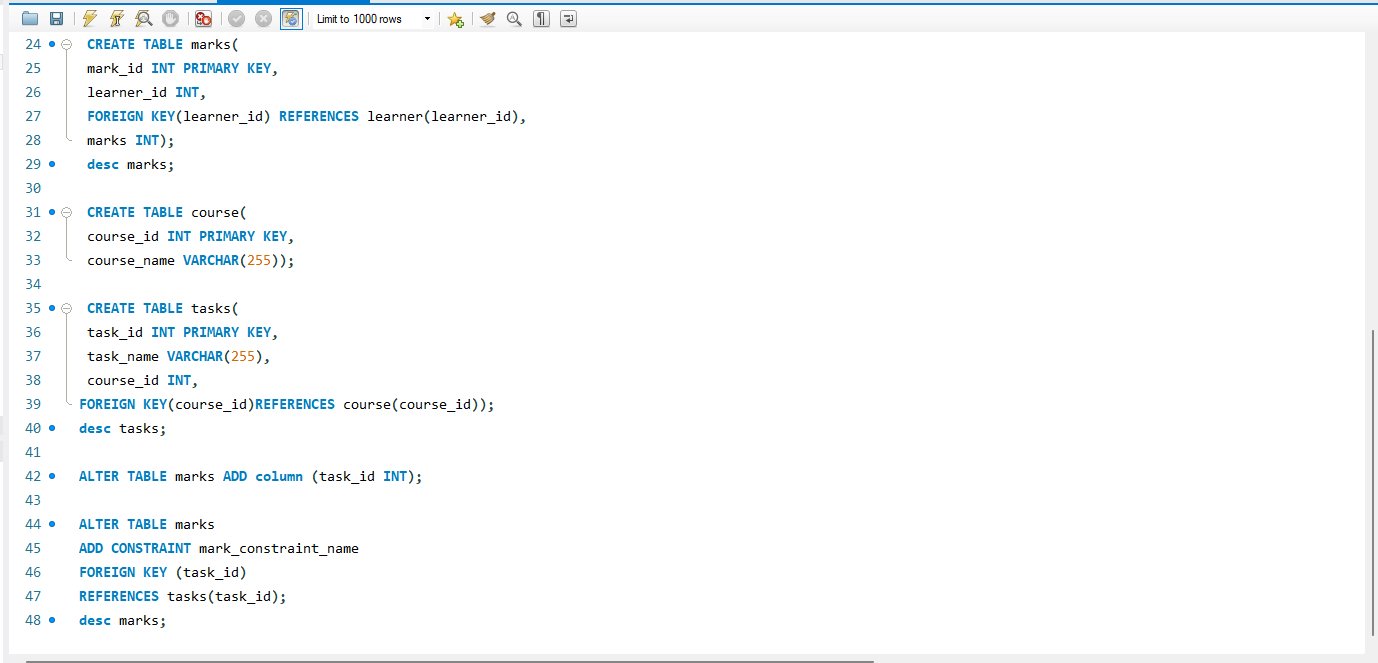
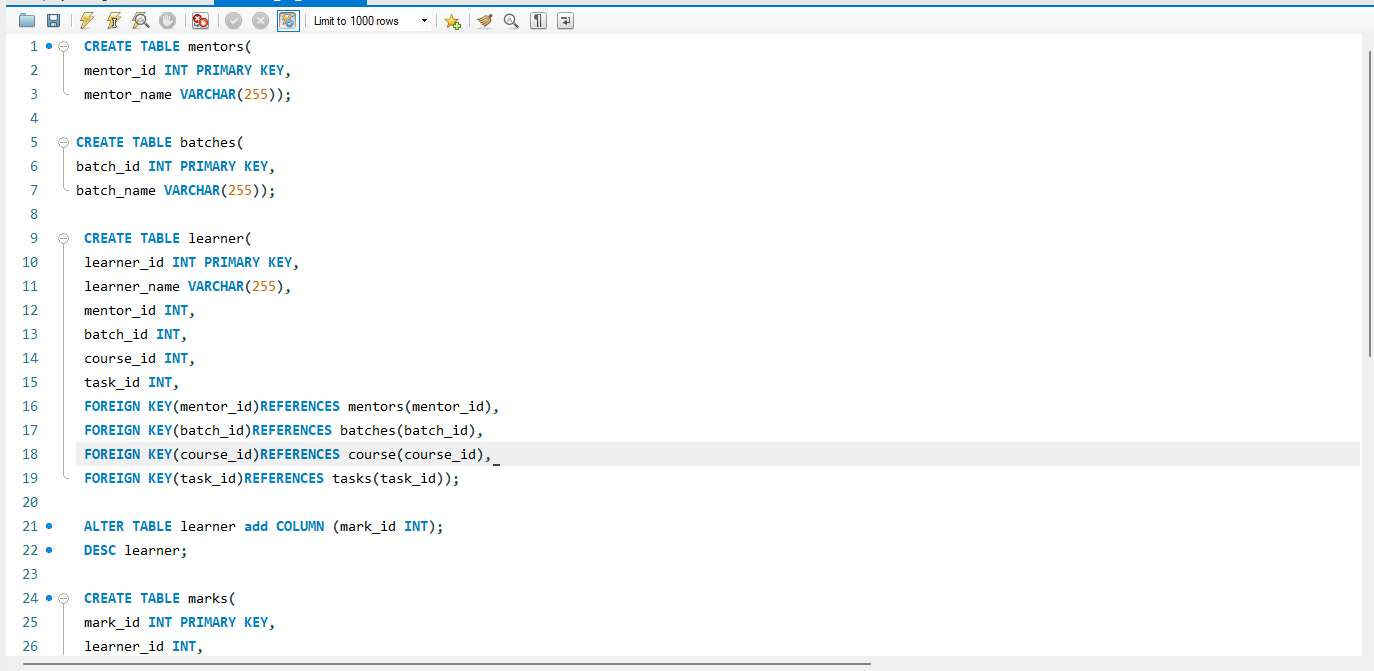
ADD CONSTRAINT mark\_constraint\_name

FOREIGN KEY (task\_id)

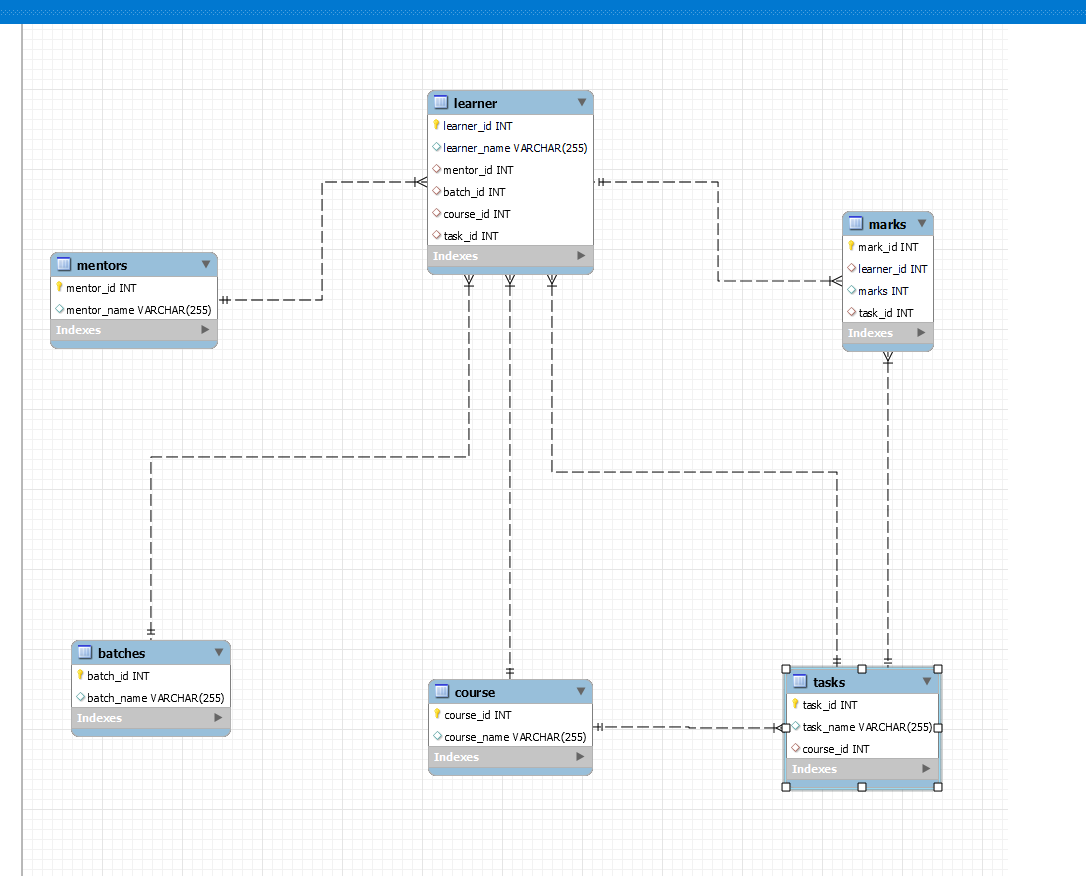
REFERENCES tasks(task\_id);

desc marks;

**SQL-QUERY;**

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**SQL-EER-DIAGRAM;**

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