



```
CREATE DATABASE Roster
  DEFAULT CHARACTER SET UTF8MB4;
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```
CREATE TABLE User (
  user_id INTEGER NOT NULL AUTO_INCREMENT,
  name VARCHAR (128),
  PRIMARY KEY (user_id)
) ENGINE = InnoDB CHARACTER SET UTF8MB4;
```

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CREATE TABLE Course (
  course_id INTEGER NOT NULL AUTO_INCREMENT,
  title VARCHAR (128) UNIQUE,
  PRIMARY KEY (course_id)
) ENGINE = InnoDB CHARACTER SET UTF8MB4;
```

```
CREATE TABLE Member (
  role_id INTEGER),
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role VARCHAR (128),
user_id INTEGER,
course_id INTEGER,
CONSTRAINT FOREIGN KEY (user_id) REFERENCES User (user_id)
        ON DELETE CASCADE ON UPDATE CASCADE,
CONSTRAINT FOREIGN KEY (course_id) REFERENCES Course (course_id)
        ON DELETE CASCADE ON UPDATE CASCADE,
PRIMARY KEY (user_id, course_id),
INDEX USING BTREE (role)
) ENGINE = InnoDB CHARACTER SET UTF8MB4;
```

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INSERT INTO User (name) VALUES ('Ramanas');
INSERT INTO User (name) VALUES ('Annie');
INSERT INTO User (name) VALUES ('Cedar');
INSERT INTO User (name) VALUES ('Cejay');
INSERT INTO User (name) VALUES ('Trassa');
INSERT INTO User (name) VALUES ('Trinity');
INSERT INTO User (name) VALUES ('Amberlouis');
INSERT INTO User (name) VALUES ('Hcen');
INSERT INTO User (name) VALUES ('Latif');
INSERT INTO User (name) VALUES ('Madison');
INSERT INTO User (name) VALUES ('Nirvana');
INSERT INTO User (name) VALUES ('Leigha');
INSERT INTO User (name) VALUES ('Nader');
INSERT INTO User (name) VALUES ('Prithvi');
INSERT INTO User (name) VALUES ('Reynold');
```

```
INSERT INTO Course (title) VALUES ('si106');
INSERT INTO Course (title) VALUES ('si110');
INSERT INTO Course (title) VALUES ('si206');
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INSERT INTO Member (role_id, role) VALUES (0, 'student')
INSERT INTO Member (role_id, role) VALUES (1, 'instructor')
```

```
INSERT INTO Member (user_id, course_id, role) VALUES ('1', '1', '1');
INSERT INTO Member (user_id, course_id, role) VALUES ('2', '1', '0');
INSERT INTO Member (user_id, course_id, role) VALUES ('3', '1', '0');
INSERT INTO Member (user_id, course_id, role) VALUES ('4', '1', '0');
INSERT INTO Member (user_id, course_id, role) VALUES ('5', '1', '0');
INSERT INTO Member (user_id, course_id, role) VALUES ('6', '2', '1');
INSERT INTO Member (user_id, course_id, role) VALUES ('7', '2', '0');
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INSERT INTO Member (user_id, course_id, role) VALUES ('8', '2', '0');
INSERT INTO Member (user_id, course_id, role) VALUES ('9', '2', '0');
INSERT INTO Member (user_id, course_id, role) VALUES ('10', '2', '0');
INSERT INTO Member (user_id, course_id, role) VALUES ('11', '3', '1');
INSERT INTO Member (user_id, course_id, role) VALUES ('12', '3', '0');
INSERT INTO Member (user_id, course_id, role) VALUES ('13', '3', '0');
INSERT INTO Member (user_id, course_id, role) VALUES ('14', '3', '0');
INSERT INTO Member (user_id, course_id, role) VALUES ('15', '3', '0');
```

```
SELECT User.name, Course.title, Member.role
FROM User JOIN Member JOIN Course
ON User.user_id = Member.user_id
AND Member.course_id = Course.course_id
ORDER BY Course.title, Member.role, User.name
```

```
SELECT Track.track_title, Track.track_count, Track.track_time, Track.track_rating, Album.album_title,  
Artist.artist_name, Genre.genre_id  
FROM Track JOIN Genre JOIN Album JOIN Artist ON Track.genre_id = Genre.genre_id  
AND Track.album_id = Album.album_id AND Album.artist_ID = Artist.artist_id  
ORDER BY Album.album_title ASC, Track.track_count ASC;
```

```
SELECT DISTINCT Track.track_title, Track.track_count, Track.track_time, Track.track_rating, Album.album_title,  
Artist.artist_name, Genre.genre_name  
FROM Track JOIN Genre JOIN Album JOIN Artist ON Track.genre_id = Genre.genre_id  
AND Track.album_id = Album.album_id AND Album.artist_ID = Artist.artist_id  
WHERE Artist.artist_name = 'Kendrick Lamar'  
ORDER BY Album.album_title ASC, Track.track_count ASC;
```