



```
CREATE DATABASE Music
    DEFAULT CHARACTER SET UTF8MB4;
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```
USE Music;
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```
CREATE TABLE Artist (
    artist_name VARCHAR (255),
    artist_id INTEGER NOT NULL AUTO_INCREMENT,
    PRIMARY KEY (artist_id)
) ENGINE = InnoDB;
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CREATE TABLE Album (
    album_title VARCHAR (255),
    album_length INTEGER,
    album_rating INTEGER,
    album_id INTEGER NOT NULL AUTO_INCREMENT,
    artist_id INTEGER,

    PRIMARY KEY (album_id),
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INDEX USING BTREE (album_title),

CONSTRAINT FOREIGN KEY (artist_id)
    REFERENCES Artist (artist_id)
    ON DELETE CASCADE ON UPDATE CASCADE
) ENGINE = InnoDB;
```

```
CREATE TABLE Genre (
    genre_name VARCHAR (255),
    genre_id INTEGER NOT NULL AUTO_INCREMENT,
    PRIMARY KEY (genre_id),
    INDEX USING BTREE (genre_name)
) ENGINE = InnoDB;
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CREATE TABLE Track (
    track_title VARCHAR (255),
    track_count INTEGER,
    track_length INTEGER,
    track_rating INTEGER,
    album_id INTEGER,
    genre_id INTEGER,
    track_id INTEGER NOT NULL AUTO_INCREMENT,

    PRIMARY KEY (track_id),
    INDEX USING BTREE (track_title),

    CONSTRAINT FOREIGN KEY (album_id)
        REFERENCES Album (album_id)
        ON DELETE CASCADE ON UPDATE CASCADE

    CONSTRAINT FOREIGN KEY (genre_id)
        REFERENCES Genre (genre_id)
        ON DELETE CASCADE ON UPDATE CASCADE
) ENGINE = InnoDB;
```

```

CREATE DATABASE Music DEFAULT CHARACTER SET UTF8MB4;
USE Music;
CREATE TABLE Artist (artist_name VARCHAR (255), artist_id INTEGER NOT NULL AUTO_INCREMENT,
    PRIMARY KEY (artist_id)) ENGINE = InnoDB;
CREATE TABLE Album (album_title VARCHAR (255), album_length INTEGER, album_rating INTEGER,
album_id INTEGER NOT NULL AUTO_INCREMENT, artist_id INTEGER,
    PRIMARY KEY (album_id), INDEX USING BTREE (album_title), CONSTRAINT FOREIGN KEY
(artist_id) REFERENCES Artist (artist_id)
    ON DELETE CASCADE ON UPDATE CASCADE) ENGINE = InnoDB;
CREATE TABLE Genre (genre_name VARCHAR (255), genre_id INTEGER NOT NULL AUTO_INCREMENT,
    PRIMARY KEY (genre_id), INDEX USING BTREE (genre_name)) ENGINE = InnoDB;
CREATE TABLE Track (track_title VARCHAR (255), track_count INTEGER, track_length INTEGER,
track_rating INTEGER, album_id INTEGER, genre_id INTEGER,
    track_id INTEGER NOT NULL AUTO_INCREMENT,
    PRIMARY KEY (track_id), INDEX USING BTREE (track_title),
    CONSTRAINT FOREIGN KEY (album_id) REFERENCES Album (album_id) ON DELETE CASCADE
ON UPDATE CASCADE,
    CONSTRAINT FOREIGN KEY (genre_id) REFERENCES Genre (genre_id) ON DELETE CASCADE
ON UPDATE CASCADE) ENGINE = InnoDB;

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INSERT INTO Artist (artist_name) VALUES ('Kendrick Lamar');
INSERT INTO Artist (artist_name) VALUES ('Billie Eilish');
INSERT INTO Artist (artist_name) VALUES ('Blackpink');

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INSERT INTO Album (album_title, album_length, album_rating, artist_id) VALUES ('Damn', 3294, 5, 1);
INSERT INTO Album (album_title, album_length, album_rating, artist_id) VALUES ('Hit Me Hard and Soft',
2625, 3, 2);
INSERT INTO Album (album_title, album_length, album_rating, artist_id) VALUES ('When We All Fall Asleep,
Where Do We Go?', 2575, 4, 2);
INSERT INTO Album (album_title, album_length, album_rating, artist_id) VALUES ('Born Pink', 1474, 4, 3);
INSERT INTO Album (album_title, album_length, album_rating, artist_id) VALUES ('The Album', 1468, 3, 3);

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INSERT INTO Genre (genre_name) VALUES ('Hip-hop');
INSERT INTO Genre (genre_name) VALUES ('Pop');
INSERT INTO Genre (genre_name) VALUES ('R&B');
INSERT INTO Genre (genre_name) VALUES ('New age');

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INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('DNA',
2, 185, 5, 1, 1);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES
('Loyalty', 6, 227, 5, 1, 3);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES
('Humble', 8, 177, 5, 1, 1);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('Love',
10, 213, 3, 1, 4);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('Bad
Guy', 2, 194, 5, 2, 2);

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INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('You Should See Me in a Crown', 4, 180, 4, 2, 2);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('All the Good Girls Go to Hell', 5, 168, 4, 2, 2);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('Wish You Were Gay', 6, 221, 3, 2, 2);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('When the Party"s Over', 7, 196, 3, 2, 2);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('Bury a Friend', 10, 193, 3, 2, 2);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('Come Out and Play', 15, 210, 4, 2, 2);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('Everything I Wanted', 18, 245, 4, 2, 2);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('Lunch', 2, 180, 4, 4, 2);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('Chihiro', 3, 303, 4, 3, 2);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('Birds of a Feather', 4, 210, 4, 5, 2);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('Wildflower', 5, 261, 4, 3, 2);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('How You Like That', 1, 181, 5, 4, 2);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('Ice Cream', 2, 176, 4, 4, 2);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('Lovesick Girls', 5, 194, 4, 4, 2);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('Pink Venom', 1, 186, 4, 5, 2);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('Shut Down', 2, 176, 4, 5, 2);
INSERT INTO Track (track_title, track_count, track_length, track_rating, album_id, genre_id) VALUES ('Jump', 18, 164, 4, 5, 2);

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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;

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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;

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