**# Create the primary entities**

**create table** Band  
(  
 **bandID int auto\_increment**,  
 **bandName varchar**(100) **not null**,  
 **constraint** Band\_pk  
 **primary key** (**bandID**)  
);

**create table** Artist  
(  
 **artistID int auto\_increment**,  
 **fName varchar**(100) **not null**,  
 **lName varchar**(100) **null**,  
 **constraint** Artist\_pk  
 **primary key** (**artistID**)  
);

**create table** Album  
(  
 **albumID int auto\_increment**,

**albumTitle varchar**(100) **not null**,  
 **liveRecording bool default false null**,  
 **constraint** Album\_pk  
 **primary key** (**albumID**));

**create table** Label  
(  
 **labelID int auto\_increment**,  
 **labelName varchar**(100) **not null**,  
 **constraint** Label\_pk  
 **primary key** (**labelID**)  
);

**create table** Song  
(  
 **songID int auto\_increment**,  
 **songTitle varchar**(100) **not null**,  
 **duration time null**,  
 **lyrics varchar**(5000) **null**,  
 **constraint** Song\_pk  
 **primary key** (**songID**)  
);

**# Create “Playlist” before “Concert” due to One-to-Many relationship**

**create table** Playlist  
(  
 **playlistID int auto\_increment**,  
 **playlistTitle varchar**(100) **not null**,  
 **constraint** Playlist\_pk  
 **primary key** (**playlistID**)  
);

**create table** Concert  
(  
 **concertID int auto\_increment**,  
 **playlistID int null**,  
 **location varchar**(100) **null**,  
 **date date null**,  
 **constraint** Concert\_pk  
 **primary key** (**concertID**),  
 **constraint** Concert\_Playlist\_playlistID\_fk  
 **foreign key** (**playlistID**) **references** Playlist (playlistID)  
 **on update cascade on delete set null**);

**# Create the relational tables**

**create table** BandArtist  
(  
 **bandArtistID int auto\_increment**,  
 **bandID int not null**,  
 **artistID int not null**,  
 **constraint** BandArtist\_pk  
 **primary key** (**bandArtistID**),  
 **constraint** BandArtist\_Artist\_artistID\_fk  
 **foreign key** (**artistID**) **references** Artist (artistID)  
 **on update cascade on delete cascade**,  
 **constraint** BandArtist\_Band\_bandID\_fk  
 **foreign key** (**bandID**) **references** Band (bandID)  
 **on update cascade on delete cascade**);

**create table** AlbumSong  
(  
 **albumSongID int auto\_increment**,  
 **albumID int not null**,  
 **songID int not null**,  
 **constraint** AlbumSong\_pk  
 **primary key** (**albumSongID**),  
 **constraint** AlbumSong\_Album\_albumID\_fk  
 **foreign key** (**albumID**) **references** Album (albumID)  
 **on update cascade on delete cascade**,  
 **constraint** AlbumSong\_Song\_songID\_fk  
 **foreign key** (**songID**) **references** Song (songID)  
 **on update cascade on delete cascade**);

**create table** PlaylistSong  
(  
 **playlistSongID int auto\_increment**,  
 **playlistID int not null**,  
 **songID int not null**,  
 **constraint** PlaylistSong\_pk  
 **primary key** (**playlistSongID**),  
 **constraint** PlaylistSong\_Playlist\_playlistID\_fk  
 **foreign key** (**playlistID**) **references** Playlist (playlistID)  
 **on update cascade on delete cascade**,  
 **constraint** PlaylistSong\_Song\_songID\_fk  
 **foreign key** (**songID**) **references** Song (songID)  
 **on update cascade on delete cascade**);

**create table** BandAlbum  
(  
 **bandAlbumID int auto\_increment**,  
 **bandID int not null**,  
 **albumID int not null**,  
 **constraint** BandAlbum\_pk  
 **primary key** (**bandAlbumID**),  
 **constraint** BandAlbum\_Album\_albumID\_fk  
 **foreign key** (**albumID**) **references** Album (albumID)  
 **on update cascade on delete cascade**,  
 **constraint** BandAlbum\_Band\_bandID\_fk  
 **foreign key** (**bandID**) **references** Band (bandID)  
 **on update cascade on delete cascade**);

**create table** BandSong  
(  
 **bandSongID int auto\_increment**,  
 **bandID int not null**,  
 **songID int not null**,  
 **constraint** BandSong\_pk  
 **primary key** (**bandSongID**),  
 **constraint** BandSong\_Band\_bandID\_fk  
 **foreign key** (**bandID**) **references** Band (bandID)  
 **on update cascade on delete cascade**,  
 **constraint** BandSong\_Song\_songID\_fk  
 **foreign key** (**songID**) **references** Song (songID)  
 **on update cascade on delete cascade**);

**create table** AlbumLabel  
(  
 **albumLabelID int auto\_increment**,  
 **albumID int not null**,  
 **labelID int not null**,  
 **constraint** AlbumLabel\_pk  
 **primary key** (**albumLabelID**),  
 **constraint** AlbumLabel\_Album\_albumID\_fk  
 **foreign key** (**albumID**) **references** Album (albumID)  
 **on update cascade on delete cascade**,  
 **constraint** AlbumLabel\_Label\_labelID\_fk  
 **foreign key** (**labelID**) **references** Label (labelID)  
 **on update cascade on delete cascade**);

**# Insert data into the tables**

**# Insert the band “Coldplay” and its members into database**

**INSERT INTO** Band  
**VALUES**

(

**null**,  
 **'Coldplay'**   
);

**INSERT INTO** Artist  
**VALUES**

(

**null**,  
 **'Chris'**,

**'Martin'**  
);

**INSERT INTO** BandArtist  
**VALUES**

(

**null**,

(**SELECT bandID FROM** Band

**WHERE bandName** = **'Coldplay'**),  
 (**SELECT artistID FROM** Artist

**WHERE fName** = **'Chris'**

**AND lName** = **'Martin'**)  
);

**INSERT INTO** Artist  
**VALUES**

(

**null**,  
 **'Jonny'**,

**'Buckland'**  
);

**INSERT INTO** BandArtist  
**VALUES**

(

**null**,

(**SELECT bandID FROM** Band

**WHERE bandName** = **'Coldplay'**),  
 (**SELECT artistID FROM** Artist

**WHERE fName** = **'Jonny'**

**AND lName** = **'Buckland'**)  
);

**INSERT INTO** Artist  
**VALUES**

(

**null**,  
 **'Guy'**,

**'Berryman'**  
);

**INSERT INTO** BandArtist  
**VALUES**

(

**null**,

(**SELECT bandID FROM** Band

**WHERE bandName** = **'Coldplay'**),  
 (**SELECT artistID FROM** Artist

**WHERE fName** = **'Guy'**

**AND lName** = **'Berryman'**)  
);

**INSERT INTO** Artist  
**VALUES**

(

**null**,  
 **'Will'**,

**'Champion'**  
);

**INSERT INTO** BandArtist  
**VALUES**

(

**null**,

(**SELECT bandID FROM** Band

**WHERE bandName** = **'Coldplay'**),  
 (**SELECT artistID FROM** Artist

**WHERE fName** = **'Will'**

**AND lName** = **'Champion'**)  
);

**INSERT INTO** Artist  
**VALUES**

(

**null**,  
 **'Phil'**,

**'Harvey'**  
);

**INSERT INTO** BandArtist  
**VALUES**

(

**null**,

(**SELECT bandID FROM** Band

**WHERE bandName** = **'Coldplay'**),  
 (**SELECT artistID FROM** Artist

**WHERE fName** = **'Phil'**

**AND lName** = **'Harvey'**)  
);

**# Insert record labels associated with “Coldplay” into database**

**INSERT INTO** Label  
**Values**   
(

**null**,  
 **'Parlophone'**  
);

**INSERT INTO** Label  
**Values**   
(

**null**,  
 **'Capitol'**  
);

**INSERT INTO** Label  
**Values**   
(

**null**,  
 **'Atlantic'**  
);

**INSERT INTO** Label  
**Values**   
(

**null**,  
 **'Third Man'**  
);

**INSERT INTO** Label  
**Values**   
(

**null**,  
 **'EMI'**  
);

**INSERT INTO** Label  
**Values**   
(

**null**,  
 **'Fierce Panda'**  
);

**# Insert albums by “Coldplay” into database**

**INSERT INTO** Album  
**Values**  
(

**null**,

**'Viva la Vida or Death and All His Friends'**,

**FALSE**);

**INSERT INTO** BandAlbum  
**Values**  
(

**null**,  
 (**SELECT bandID FROM** Band

**WHERE bandName** = **'Coldplay'**),

(**SELECT albumID FROM** Album

**WHERE albumTitle** = **'Viva la Vida or Death and All His Friends'**));

**INSERT INTO** AlbumLabel  
**Values**  
(

**null**,  
 (**SELECT albumID FROM** Album

**WHERE albumTitle** = **'Viva la Vida or Death and All His Friends'**),

(**SELECT labelID FROM** Label

**WHERE labelName** = **'Parlophone'**));

**INSERT INTO** AlbumLabel  
**Values**  
(

**null**,  
 (**SELECT albumID FROM** Album

**WHERE albumTitle** = **'Viva la Vida or Death and All His Friends'**),

(**SELECT labelID FROM** Label

**WHERE labelName** = **'Capitol'**));

**INSERT INTO** Album  
**Values**  
(

**null**,

**'Ghost Stories Live 2014'**,

**TRUe**);

**INSERT INTO** BandAlbum  
**Values**  
(

**null**,   
 (**SELECT bandID FROM** Band

**WHERE bandName** = **'Coldplay'**),

(**SELECT albumID FROM** Album

**WHERE albumTitle** = **'Ghost Stories Live 2014'**));

**INSERT INTO** AlbumLabel  
**Values**  
(

**null**,  
 (**SELECT albumID FROM** Album

**WHERE albumTitle** = **'Ghost Stories Live 2014'**),

(**SELECT labelID FROM** Label

**WHERE labelName** = **'Parlophone'**));

**INSERT INTO** AlbumLabel  
**Values**  
(

**null**,  
 (**SELECT albumID FROM** Album

**WHERE albumTitle** = **'Ghost Stories Live 2014'**),

(**SELECT labelID FROM** Label

**WHERE labelName** = **'Atlantic'**));

**# Insert songs by “Coldplay” into database**

**INSERT INTO** Song  
**VALUES**  
(

**null**,

**'Viva la Vida',**

**'00:04:01',**  
 **'I used to rule the world**

**Seas would rise when I gave the word**

**Now in the morning, I sleep alone**

**Sweep the streets I used to own**

**I used to roll the dice**

**Feel the fear in my enemy\'s eyes**

**Listen as the crowd would sing**

**Now the old king is dead! Long live the king!**

**One minute I held the key**

**Next the walls were closed on me**

**And I discovered that my castles stand**

**Upon pillars of salt and pillars of sand**

**I hear Jerusalem bells are ringing**

**Roman Cavalry choirs are singing**

**Be my mirror, my sword and shield**

**My missionaries in a foreign field**

**For some reason I can\'t explain**

**Once you go there was never, never a honest word**

**And that was when I ruled the world**

**It was a wicked and wild wind**

**Blew down the doors to let me in**

**Shattered windows and the sound of drums**

**People couldn\'t believe what I\'d become**

**Revolutionaries wait**

**For my head on a silver plate**

**Just a puppet on a lonely string**

**Oh, who would ever want to be king?**

**I hear Jerusalem bells are ringing**

**Roman Calvary choirs are singing**

**Be my mirror, my sword and shield**

**My missionaries in a foreign field**

**For some reason I can\'t explain**

**I know Saint Peter won\'t call my name**

**Never an honest word**

**But that was when I ruled the world**

**Oh, oh, oh, oh, oh**

**I hear Jerusalem bells are ringing**

**Roman Calvary choirs are singing**

**Be my mirror, my sword and shield**

**My missionaries in a foreign field**

**For some reason I can\'t explain**

**I know Saint Peter won\'t call my name**

**Never an honest word**

**But that was when I ruled the world'**  
);

**INSERT INTO** AlbumSong  
**Values**  
(

**null**,  
 (**SELECT albumID FROM** Album

**WHERE albumTitle** = **'Viva la Vida or Death and All His Friends'**),

(**SELECT songID FROM** Song

**WHERE songTitle** = **'Viva la Vida'**

**AND lyrics LIKE** **'I used to rule the world%'**));

**INSERT INTO** BandSong  
**Values**  
(

**null**,  
 (**SELECT bandID FROM** Band

**WHERE bandName** = **'Coldplay'**),

(**SELECT songID FROM** Song

**WHERE songTitle** = **'Viva la Vida'**

**AND lyrics LIKE** **'I used to rule the world%'**));

**INSERT INTO** Song  
**VALUES**  
(

**null**,

**'Always in My Head'**,  
 **'00:03:36',**  
 **'I think of you  
 I haven\'t slept  
 I think I do  
 But, I don\'t forget  
 My body moves  
 Goes where I will  
 But though I try my heart stays still  
 It never moves  
 Just won\'t be led  
  
 And so my mouth waters, to be fed  
 And you\'re always in my head  
  
 You\'re always in my head  
 You\'re always in my head  
 You\'re always in my head  
  
 You\'re always in my head  
 Always in my...  
 Always in my...  
  
 This, I guess, is to tell you you\'re chosen out from the rest...'**  
);

**INSERT INTO** AlbumSong  
**Values**  
(

**null**,  
 (**SELECT albumID FROM** Album

**WHERE albumTitle** = **'Ghost Stories Live 2014'**),

(**SELECT songID FROM** Song

**WHERE songTitle** = **'Always in My Head'**

**AND lyrics LIKE** **'I think of you%'**));

**INSERT INTO** BandSong  
**Values**  
(

**null**,  
 (**SELECT bandID FROM** Band

**WHERE bandName** = **'Coldplay'**),

(**SELECT songID FROM** Song

**WHERE songTitle** = **'Always in My Head'**

**AND lyrics LIKE** **'I think of you%'**));

**# Insert “Coldplay” concert using prescribed playlist into database**

**INSERT INTO** Playlist  
**Values**  
(

**null**,  
 **'Coldplay Live 2014'**);

**INSERT INTO** PlaylistSong  
**Values**  
(

**null**,   
 (**SELECT playlistID FROM** Playlist

**WHERE playlistTitle** = **'Coldplay Live 2014'**),

(**SELECT songID FROM** Song

**WHERE songTitle** = **'Viva la Vida'**

**AND lyrics LIKE** **'I used to rule the world%'**));

**INSERT INTO** PlaylistSong  
**Values**  
(

**null**,  
 (**SELECT playlistID FROM** Playlist

**WHERE playlistTitle** = **'Coldplay Live 2014'**),

(**SELECT songID FROM** Song

**WHERE songTitle** = **'Always in My Head'**

**AND lyrics LIKE** **'I think of you%'**));

**INSERT INTO** Concert  
**Values**  
(

**null**,  
 (**SELECT playlistID FROM** Playlist

**WHERE playlistTitle** = **'Coldplay Live 2014'**),

**'Royal Albert Hall, London, England'**,

**'2014-07-01'**);